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Editorial Notes.

This Week's "Review."

The current issue of the Petroleum Review,' which by-the-bye marks the commencement of our XVI. volume, will be found to be of more than usual interest to our readers throughout the world, but especially those whose business is wrapt up in the oil trade of this country. In the contents are not only included the first of a series of articles dealing in a retrospective form with the development of the various petroleum producing regions during the past year, but special diagrams illustrate at a glance the London prices of American and Russian oils for the twelve months as compared with the quotations ruling for the year 1905, the prices of Pennsylvanian and Baku crude, and also the imports into this kingdom of petroleum products for the year, while the production of the English Companies operating in Russia is shewn for the two past years in diagramatic form. Other articles, exceedingly *apropos* for this season of the year, tend to make this week's issue of special interest.

Twelve Months' Petroleum Imports.

We are now in a position to give the total imports of petroleum and its products into this country for the past twelve months. These figures cannot be said to be at all satisfactory, simply because a decrease of more than 10,000,000 gallons has to be recorded. It is, of course, common knowledge that our shipments from Russia have received a severe set back during the year on account of the strikes and disorders in the Caucasus, and the abnormal state of things which has prevailed during part of 1906. Our imports from these fields have practically been cut down by one-half, and though those from America have made some slight increase, this has been almost insignificant. The Dutch Indies, however, have come forward remarkably well, and the 16,000,000 gallons of motor spirit which has been received from the Far East during the past year have gone a long way to make up the deficit above mentioned. Illuminating oil from America has decreased about 10,000,000 gallons, but, on the other hand, the imports of American lubricating oil have counterbalanced. As is to be expected, the imports of benzine have increased at a wonderful rate during the year, but here, again, America has dropped off in her imports, much to the advantage of the Dutch Indies, from which place no less than 15,000,000 gallons have been marketed in this country during the twelve months. We hope, in a future issue, to touch upon the year's imports of petroleum products at greater length.

Californian Export Trade Expands.

The latest news from California is of a most gratifying nature to those firms who have interests in the various prolific fields within that State, for it is now seen that California is upon the eve of a remarkable development in her petroleum export trade. So far, as our readers are aware, the one thing which has acted as a check upon California's advance has been her want of foreign markets for her continually increasing oil production, but in the future this want of additional openings will, we feel convinced, be quite satisfied. Whether we take the oil shipping business of the Standard Oil Co. from the Californian coast, or the Union Oil Co., or the Associated, we see the unmistakable trend of events. To facilitate the transport of refined oil between San Francisco and the Orient, the former company has recently withdrawn some of its large tank steamers from trading in other parts, while both the Union and the Associated have made great additions to their respective bulk-carrying fleets. The recent extensive contracts with Japan and Chile are only two of the numerous new openings which have been taken advantage of in order that the Californian oil industry may continue to grow in its importance, even though now it is still in its infancy.

Details concerning Baku—its Market and Production.

Consequent upon the slow progress which is being made in the Baku oil fields to bring production to its normal level, prices both for crude oil and residuals are stiffening. The market however, is not very active, probable buyers preferring to waive their orders until more suitable prices are reached. The producers on their part are doing all possible in baling operations to increase the output of the fields, but still the figures of the November production fall far below former levels, being about 40,000,000 poods. The number of new completions in drilling remains small, and insufficient to make up for the number of wells which continually drop out of the producing list. It is, therefore, plain that the attention of the Baku producers at present centres chiefly on the exploitation of the oil wells. With regard to the marketing of Russian oil, considerable changes have lately taken place, and there is now a noticeable shrinkage in the sale of kerosene for export purposes, and of liquid fuel for the home market. The competition of America, Roumania and Galicia has compelled the exporters to restrict their export operations, for with the shortage of crude oil, and the consequently high prices which prevail, they are unable to compete.

The "Shell" and its Amalgamation.

The amalgamation of the "Shell" Transport and Trading Co. with the Royal Dutch Petroleum Co. is now practically assured, since the shareholders at their extraordinary general meeting this week unanimously agreed to the scheme.

A careful consideration of the events that have led up to this amalgamation cannot fail to impress one with the desirability that the interests of these two important companies should be amalgamated, and though, as Sir Marcus Samuel tritely put it at the meeting, the "Shell" have naturally been somewhat reluctant to sink ther independence, there has been no alternative before them in the interests of the shareholders, but to recognise that as their supplies of oil are obtainable from territory under Ducth jurisdiction, it is a sounder policy to amalgamate those interests with those of other Dutch producers who enjoy the confidence and aid of their Government. The above remark places the whole matter in a nutshell, and the directorate of the "Shell" Co., who, after all, have the predominating financial interest in their undertaking are to be congratulated upon bringing about a scheme, the essence of which recognises the value of co-operation as opposed to open competition.

◆

PRODUCTION OF ENGLISH COMPANIES IN RUSSIA.

Baku Russian Petroleum Co., Ltd.—The production for the week ended 22nd December was 268,000 poods, or 4,320 tons; but for the week ended 29th December no details are to hand.

Russian Petroleum and Liquid Fuel Co., Ltd.—The production for the week ended December 23rd was 288,000 poods, or 4,643 tons; and for the week ended 30th December, 249,000 poods, or 4,014 tons.

Spies Petroleum Co., Ltd.—The output for the week ended December 23rd was 120,960 poods, or 1,950 tons; and for the week ended 30th December, 111,260 poods, or 1,794 tons.

The European Petroleum Co., Ltd.—The production for the week ended 23rd December was 148,204 poods, or 2,389 tons; and for the week ended 30th December was 142,405 poods, or 2,296 tons.

◆

TIN PLATES.

Messrs. Norton, Owen & Co., of 4, Bishopsgate Street Within, London, E.C., report under date 3rd January, 1907, as follows:—

There were considerable fluctuations in this market during the year 1906, chiefly owing to the abnormal advance in price of tin, which in May touched the record price of £215 per ton. Further, the market has been considerably affected by the increased cost of steel, which is now £1 per ton dearer than in the early part of the year. Oil sizes were at the lowest at the end to the first quarter of the year, when they touched 12s. 3d. and 17s. 6d., but prices have since recovered and remain unchanged at the same level as our last report, as below. This year the market has so far hardly recovered from the 'Xmas holidays, and, pending the quarterly meeting of the Iron, Steel and Tin Plate Trades at Birmingham next week, there is not much business doing.

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PETROLEUM IMPORTS INTO GERMANY.

DETAILS OF NOVEMBER'S TRADE.

The following were the imports of petroleum products into Germany during November as compared with those of October:—

	November. Tons.	October. Tons.
Illuminating oil	107,026	82,820
Lubricating oil	16,298	24,470
Crude benzine	9,060	9,368
Refined benzine and petroleum Ether	1,217	1,180
Crude oil	699	1,540
Residuals	23	31
Artificial turpentine and other mixtures	109	104
Gas oil	381	383
Total	134,813	119,896

The imports from the different producing countries were as under:—

	November. Tons.	October. Tons.
U.S.A.	98,053	85,043
Russia	12,992	12,773
Austria-Hungary	10,973	10,043
Dutch-India	7,860	8,117
Roumania	2,864	2,217
Other countries or of unknown origin	2,071	3,709
Total	134,813	119,896

The exports of various petroleum products from Germany during November were:—Lubricating oils, 950 tons; residuals, 340 tons; benzine, 577 tons; illuminating oils, 84 tons; in all 1,951 tons.

◆

THE FERGHANA OIL FIELD.

The following are some official figures supplied by the district mining engineer, of Turkestan, to the Mining Department, concerning the operations of the Tchimion Petroleum Co. in the locality of Tchimion in the Margellan district in the Province of Ferghana.

The company possesses 151 acres of land, upon which they have laid down 15 boreholes of diameters ranging from 22 to 26 inches. Seven boreholes are now in exploitation, while on two work has been stopped, one at a depth of 1.503 feet, and an end diameter of 16 inches, and the second at a depth of 1,498 feet, and an end diameter of 16 inches. The remaining wells are in course of drilling.

With reference to the producing wells the following data is given. No. 1 has a starting diameter of 26 inches, and a finishing diameter of 14 inches; the depth is 936½ feet, and the daily output 2,000 poods; No. 2, starting diameter 22 inches, finishing diameter 14 inches, depth 935½ feet, daily output 800 poods; No. 3, starting diameter 22 inches, finishing diameter 14 inches, depth 955 feet, daily output 3,400 poods; No. 4, starting diameter 24 inches, finishing diameter 16 inches, depth 1,030½ feet, daily output 4,500 poods; No. 7, starting diameter 25 inches, finishing diameter 18 inches, depth 1,039½ feet, daily yield 2,300 poods; No. 8, starting diameter 26 inches, finishing diameter 14 inches, depth 1,189 feet, daily yield 350 poods; No. 10, starting diameter 26 inches, finishing diameter 14 inches, depth 1,024 feet, daily yield 5,000 poods.

The Petroleum Industry during 1906.

A Brief Retrospect.

Exactly a year ago, when dealing briefly with the chief events of interest to the petroleum industry that had transpired during 1905, we incidentally mentioned that the outlook for 1906 was exceedingly bright, and it promised to see the oil industry placed upon a firmer basis during its run. It is pleasing to think that the past year has come up to expectations.

It saw progress in many directions, and during its run, the foundations of wide expansions of the petroleum industry were laid, while in other ways these were moulded afresh – events all having their own peculiar significance as tending to place the oil trade in a more important position in the category of commerce than it has enjoyed hitherto.

Following upon the end of the war of prices, which ran almost through the whole of 1905, we are pleased to note a more friendly spirit characterising the dealings of those firms interested in the distribution of petroleum at home, and it can safely be asserted that during the past year, the distribution of petroleum and its allied products in this country has been carried on upon far more profitable lines than those followed during the preceeding twelve months. There have been many rumours of amalgamations during the year, but it was left to the last few weeks of 1905 to see the culmination of an arrangement between two important oil distributing companies, by which both the Consolidated and the General Petroleum Companies pass out of existence as separative and competitive concerns, their place being taken by the British Petroleum Co., which has been registered with half-a-million capital. As we have maintained more than once, unnecessary competition is to be deplored, and if the new combination of interests does nothing more than render impossible the repetition of the periods of 1904 and 1905 when enormous sums were lost, then it will have more than justified its existence.

England, not being a producing country, its interest in petroleum and the allied products is practically limited to the volume of trade done for home consumption, and consequently the statistics of the imports into this country are of importance as shewing whether we, as a country, are really progressing in the use of petroleum products. This being so, then it is to be regretted that the year 1906 saw a not inconsiderable diminution in the volume of imported oil products, this decrease taking place mostly with regard to illuminating oil. We are not going to argue that the turning point has come, and that the use of oil for illuminating purposes in the United Kingdom has now become permanent in its retrogression, but it does seem to us that those who are responsible for the management of the various oil distribution companies in this country, and whose operations are practically limited to the illuminating oil branch, should strive to do all they possibly can to put forward the claims of oil.

The consumption of illuminants has, as we have said, considerably decreased during the past year, and this decrease (shared mainly by Russia, but also by America) is bound in time to be felt by the various companies in whose hands the remarkably well-organised distribution is. We do, therefore, trust that the year which has just opened may, ere its close, see the initiation of a movement by which oil may find thousands of new and satisfied users in this country-

But perhaps the branch of our import trade to which the greatest attention has been paid during the past year has been that of the imports of benzine, which have increased during the twelve months by about 50 per cent. One very significant feature in the benzine import statistics is that the bulk of motor spirit no longer comes from the Pennsylvanian fields. The Dutch Indies have suddenly come to the front, and for the past year have supplied no less than 15,000,000 gallons, which have been landed in England.

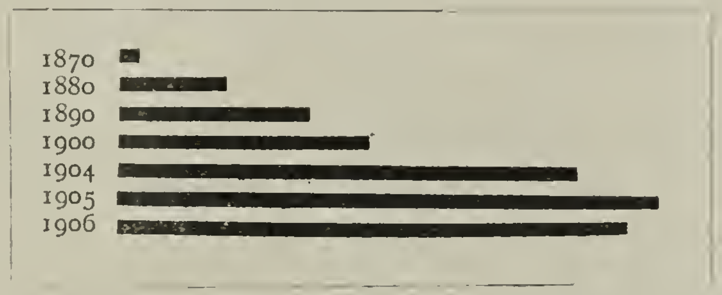
The progress which has been so marked in this connection during the past year is certain to continue for a long period to come, and considerably larger quantities of spirit are bound to be imported year after year. One thing, however, which should not be forgotten is that, inasmuch as benzine is a by-product, the attention of all interested in the progress of the petroleum industry at home should be directed toward procuring additional spheres of usefulness for other petroleum products, otherwise, what might have been fortune, may be turned to disaster.

So far as the mineral oil trade of Scotland is concerned, the past year has been from almost every point of view a very prosperous one, for not only have the good prices of the preceding twelve months been maintained, but the majority of the liquid products have been sold at much higher figures. The consequence has been that the profits of the operating companies have been greatly increased, and in view of the looked for increase in the dividends to be paid, the shares of the companies have strengthened considerably on the Stock Exchange during the year. At the end of 1905, the shares of the Pumpherston Oil Co., stood at 76s. 6d., but during the year they have risen to the extent of over 53s., closing last week at 130s. The Broxburn Co.'s shares too have increased in value from a trifle over £18 to £23, while Young's ordinary and the B debentures have both considerably strengthened during 1906, the former by 14s. and the B debentures by exactly £30 and are still strengthening,

With regard to the outlook for the new year, there is every reason to believe that things will remain in their present highly satisfactory position, for the market for the products of distillation has every appearance of remaining strong. Consequently therefore, those interested in the Scotch shale oil industry have every reason to be contented.

AMERICA.

In the American producing fields, the past year has been a very eventful one, and will long live in the memory of those directly interested in the American petroleum industry. But apart from the various happenings, of which we shall briefly speak later, the year 1906 will be stamped as the period which, in spite of almost unprecedented activity, saw a decline in the total production of the United States. Up to the present, it is, of course impossible to say the true extent of this decline, but it may be taken to represent roughly 10,000,000 barrels, thus bringing the total production to 124,000,000 barrels as against 134,000,000 barrels for 1905. The following diagram forcibly illustrates this point:—



Many are the causes which have led up to the decreased production, and these causes, it will be noticed, vary in the various fields. In the Pennsylvanian fields, for instance, the decrease of approximately 3,000,000 barrels which we calculate to be the decrease in production during 1905 as compared with 1904 is accounted for totally by the declining yield of the oil wells on the one hand, and the poor quality of the ground drilled for new operations on the other. There has been a most persistent search for new productive territory during the past year throughout the Appalachian field, and the results achieved speak very clearly of the trend of events in the high grade oil producing regions of that portion of America. Against the decrease of production, too, there comes an increased demand which has been so consistently increasing that the oil field stocks have been steadily drawn upon until now they are nearly wiped out. But in spite of the comparatively poor results which the drill has achieved during 1906, it is gratifying to note that considerable activity prevailed among operators until the wintry weather compelled an almost general cessation of field work, and therefore it is to be hoped that the energy which will be put forward in the spring may be rewarded by the discovery of a few new pools. Otherwise the outlook in Pennsylvania is not at all good.

The past year has not witnessed any great momentary boom of any particular district in America, though some very important strikes have been made known. The several "booms" which occurred during the few preceding years especially in the Texas fields, sank one by one almost out of existence altogether during 1905, and prominent among these we should mention the Humble territory which has decreased in its rate of yield to such an extent that it has now become little if anything more than an ordinary pumping field. From the reports which we have received from time to time, and the various data already published, we have every reason to believe that the decrease in the Texas production for the past twelve months will be the largest decrease recorded in any of the American fields—in the region of 40 per cent. for its total production (including also that of Louisiana) cannot be much more than 20,000,000 barrels during the year. Consequently the production has been below the demand, and the constant drawing upon stocks has rendered it absolutely necessary that if the Texas refineries are to be run at anything like their full capacity, oil supplies will have to be drawn from elsewere. The amalgamation of the interests of the Gulf-Guffey Oil Companies, which matter was referred to in the last issue of the Review will be too fresh in the minds of readers to need any repetition here, but the project for the trunk lines to the Mid-Continent fields is in itself suggestive of the great need which exists among the refining interests on the Gulf coasts for a supply of oil entirely independent of Texas.

Turning then to California, here again we find that a greatly decreased production has to be recorded during 1906, but this has been brought about by conditions entirely different to those which are found in the Texas or Pennsylvanian fields. The Caliornian wells have not been producing to their full capacity; in fact, large numbers of them have been shut down for months awaiting an improvement in the market conditions. As is well known, California to-day is capable of almost doubling her output of crude oil, but until far more extended markets are found for the products, many operating firms have long ago come to the conclusion that is not profitable to produce large quantities of oil for which no immediate market can be found, or if so, at prices which are not profitable. Thus, California is in the enviable position of having at her command very large supplies of oil once the demand is created, and in order to increase that supply when needed, many operators have, during the past year been carrying out much prospective work, as a result of which more territory has been proven to be oil producing. Matters are now gradually shaping themselves very satisfactorily, and ere long we shall see a fillip given to the Californian industry such as has never before been experienced.

We have so far touched with the old fields in America, the production of each of which experienced a substantial decline last year. Now we will turn our attention to to those territories—of the newer order—which have made rapid advance during the past twelve months. Without doubt if the eyes of those interested in the developments of the American petroleum industry rest upon any one particular set of fields, they are upon those territories known as the Mid-Continent fields. About two years ago we described a tour through the regions of Kansas and Indian Territory undertaken by Dr. Dvorkovitz, but since that time, the activity displayed and the progress achieved has been even more pronounced until now we find that the most perfect and the largest organisation in the world for handling petroleum has to admit that all its forces working day and night is far from sufficient to keep pace with the greatly increasing production. The result has been that in a large number of cases throughout Kansas, Indian Territory and Oklahama, wells have been shut down, and the drill has for the time being been laid aside. Pipe lines have been laid in almost every conceivable direction and in addition, numberless tank cars are now taking large quantities of crude oil from the fields for refining elsewhere so that the present congestion may be relieved, but still there remains a surplus more than sufficient to meet all possible requirements. This, then is how matters stand at the present time, but thanks to the project now to be pushed toward realisation, one or two trunk pipe lines are to connect the fields with the Gulf coast refineries, and thus the Mid Continent fields will increase in their importance, and at the same time give out a production which we would conservatively place at 35,000,000 barrels per annum. Even with oil field work having been suspended for some time, and many of the wells being closed, the production for the past year of Kansas and Indian Territory is bound to have been over 20,000,000 barrels, or nearly double what it was in 1905.

Another region which witnessed remarkable developments during the past year has been Illinois. A year ago, Illinois was unknown in the matter of oil production, but to-day it is producing at least 40,000 barrels per day, with every prospect of still further strengthening its position as a producing State when the new facilities are in operation. The Illinois field is remarkable if only on account of the prolific nature of the ground which has come under the drill so far, and though operations have slackened somewhat now for the winter, it is tolerably certain that early in the spring this region will furnish a flood of oil which will be more than sufficient to counterbalance the decreasing production from the Pennsylvanian fields for some time to come.

The year has been singularly free from discontent among the operators throughout the various territories, and though the present price of crude fails to satisfy many producers, it is well to remember that quotations during the year have been rather more substantial than they were in 1905.

With regard to the Canadian fields, the past twelve months have formed a period of quite unprecedented activity, and the discovery of the fields in the township of Tilbury and Raleigh, Ontario, which are proving to be the most prolific in Canada, suggests that the year 1907 will witness developments in the Canadian fields, the like of which have not before been known.

In closing this brief review, it is only becoming on our part that we should say a word upon the persecution which has been aimed at the Standard Oil Co. during the past few months. The vast organisation which it possesses throughout the American fields has been a mighty power for good in the past, and if that power is to be minimised in the future, then the loss will be national, for an important branch of America's commerce will be weakened. It is to be hoped, however, that the decision of Judge Duncan at Ohio last Monday week when he threw out the verdict of guilty of conspiring to restrain trade returned against the Standard last October, wlll have its full effect in the recent indictments filed at St. Louis against the officials of the company.

(To be continued.)

PRODUCTION OF THE GROSNY OIL FIELDS DURING THE FIRST HALF OF 1906.

We are now able to publish the official figures compiled by the Grosny Petroleum Association of the production of crude oil at the Grosny oil fields during the first half of 1906.

The total production of crude oil during the half year, or, to be more correct, the 5½ months, as half a month was taken up by a general strike, amounted to 20,008,397 poods. The production for the whole of 1905 amounted to 43,073,734 poods. The production by spouters in the first half of 1906 amounted to 5,538,245 poods. The monthly figure of the production by spouters fluctuated widely from 133,575 poods in February to 2,885,055 poods in January. On the other hand, the production by baling proceeded very evenly, and kept within the limits of 2,428,212 poods in February and 2,885,055 poods in May. In the half of June during which work was in progress there were produced 1,394,048 poods.

The production of the individual firms during the half year was as under:—

	Total Production. Poods.	Production by Spouters. Poods.
Akhverdoff Co.	11,286,100	5,472,500
Spies Petroleum Co. Ltd.	3,020,803	25,045
Anglo-Russian Maximoff Co., Ld.	2,326,300	2,600
North Caucasian Co.	886,775	37,150
Kasbeck Syndicate Co , Ltd.	622,450	—
Tcheleken-Dagestan Co.	502,189	—
Russian Standard	422,599	—
Moscow Co.	231,150	—
Caspian and Black Sea Society	230,125	—
Grosny Oil Co.	197,777	—
St. Petersburg Co.	143,100	—
James MacGarvey	74,046	—
Kholodovsky	32,126	—
Vladicaucasian Co.	23,115	—
Executors of Mr. Maximoff	9,150	—

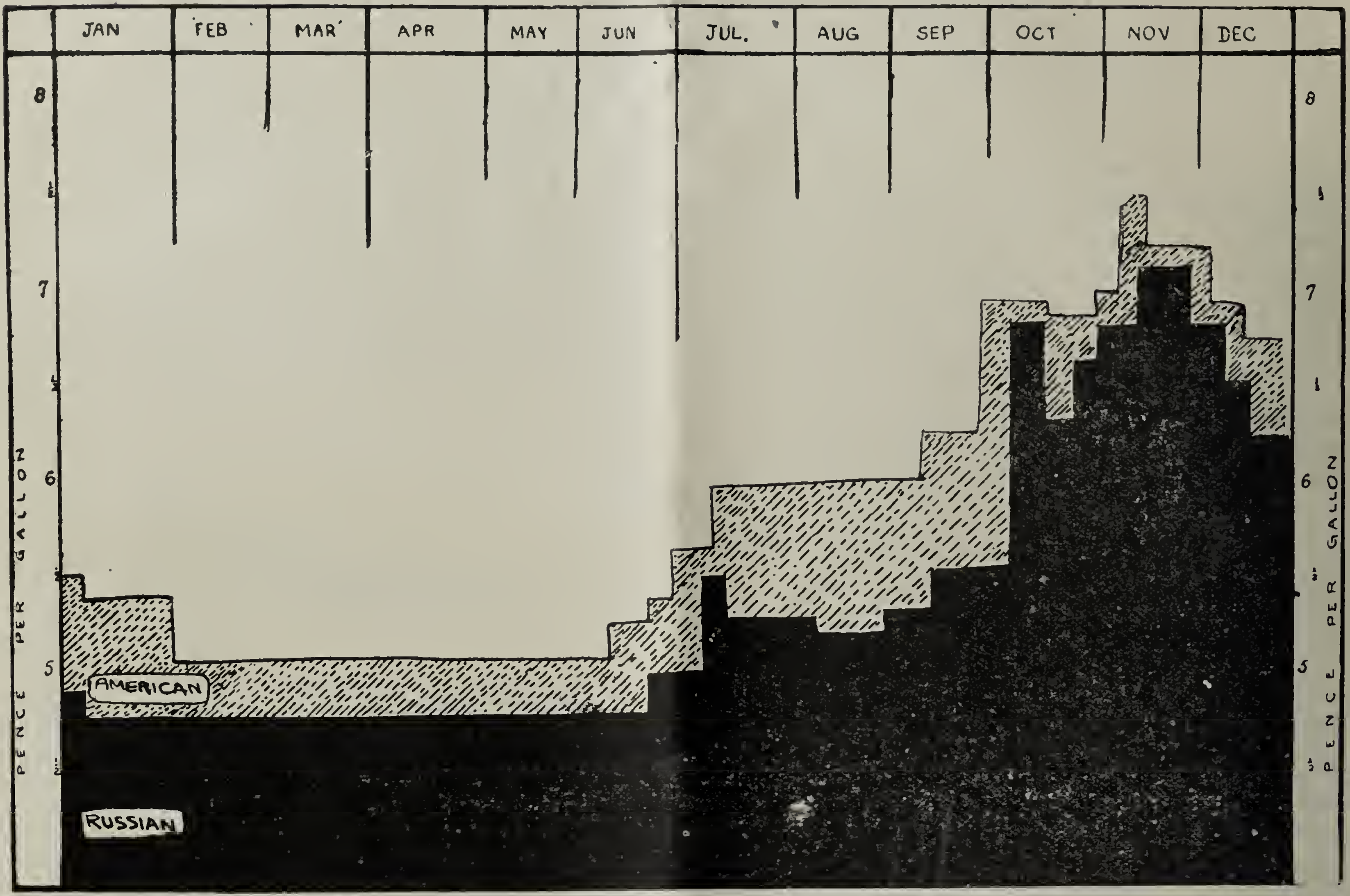
At the end of June, 1906, oil was produced at Grosny from 151 boreholes. The number of plots in exploitation was 41. During the half year one new plot, No. 9, of the executors of Mr. Maximoff was added to the number of plots in exploitation.

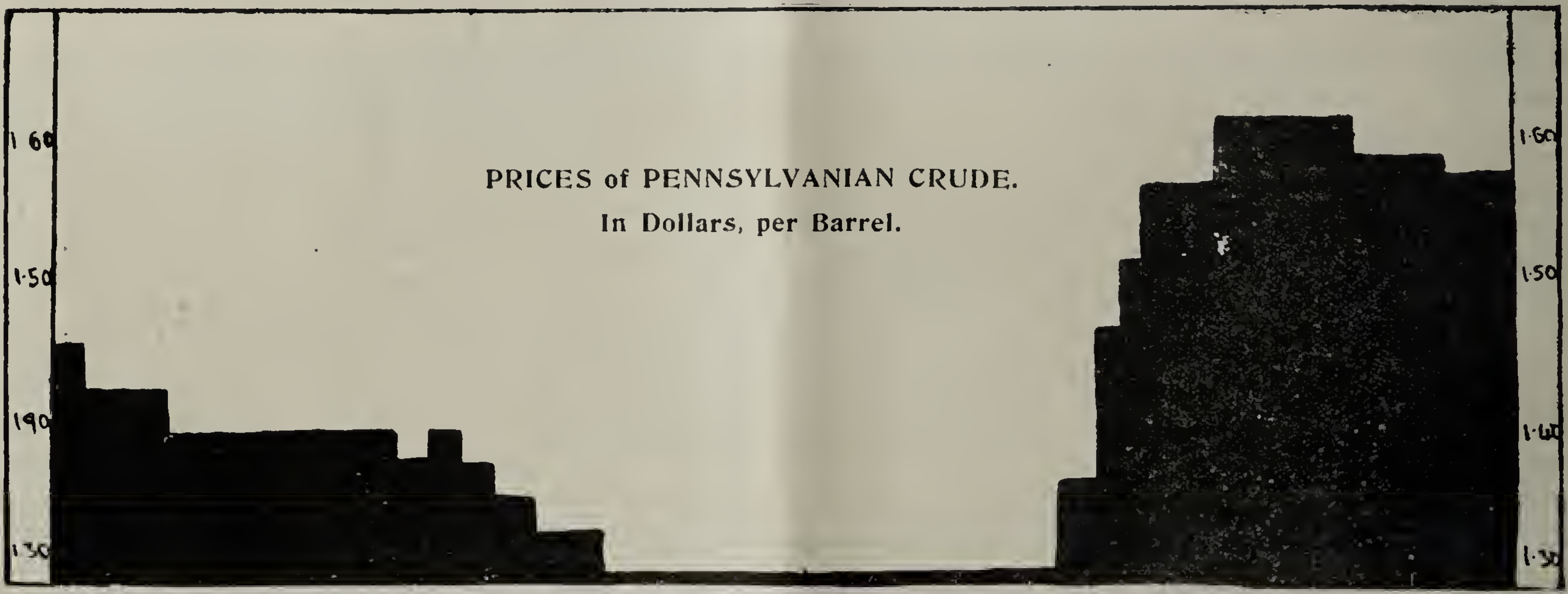
THE DALMENY OIL COMPANY, LTD.

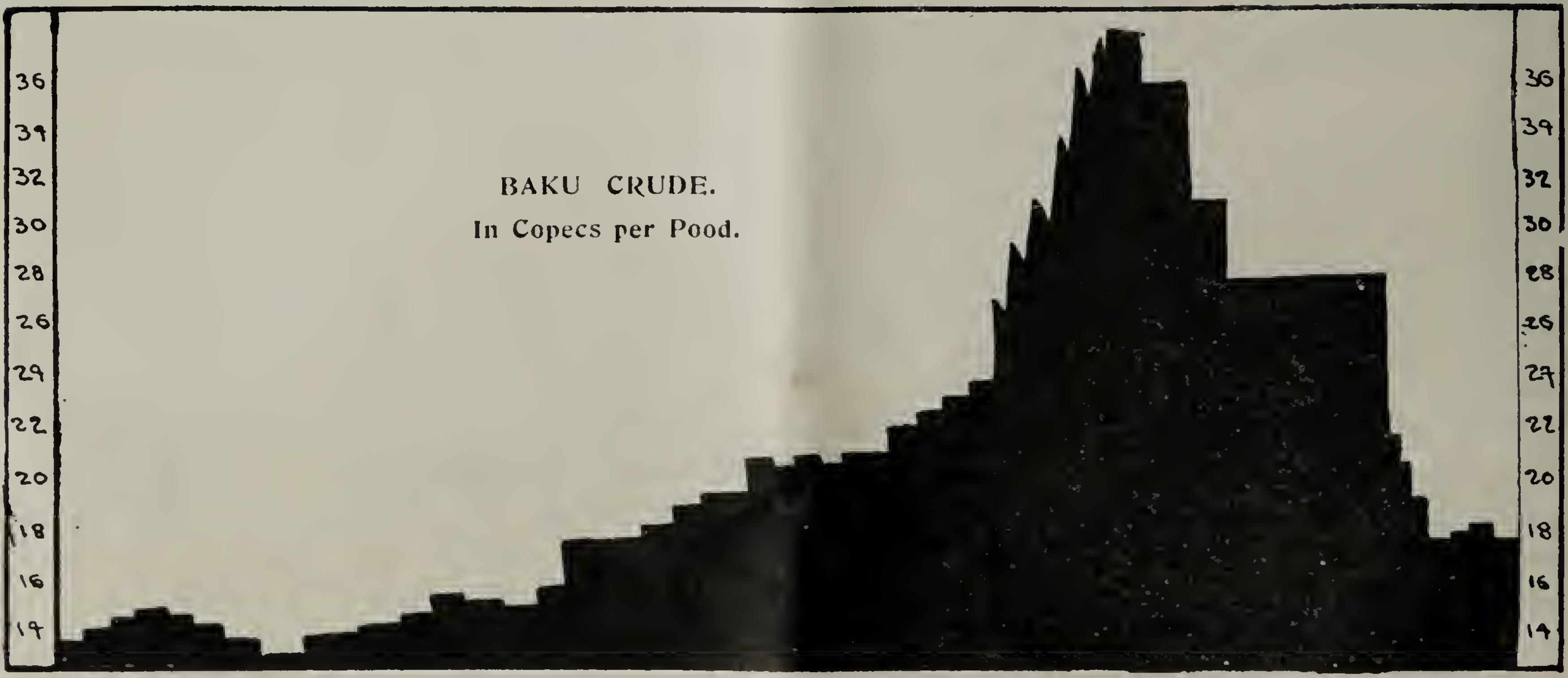
The report of the Dalmeny Oil Co., Ltd., for the year ended 31st October, 1906, states that at the close of last year's account there was a sum of £847 carried forward at credit of profit and loss, after payment of the dividends declared at the last annual general meeting. The result of the working during the past year has been to shew a profit of £2,689, including therein the sum carried forward. The profit has been less than in previous years. The workings during the year have been in parts of the mines affected by a creep in the pillars. These difficulties though temporary, are not yet finally overcome, but everything has been done to bring about normal working costs. The diminished profit was caused by the shale from the troubled places yielding less products, with increased working costs. The directors recommend that £1,842 of the sum at credit of profit and loss account be applied in paying a dividend at the rate of 5 per cent. per annum (less income-tax) on the preference or " A " shares, and of 2½ per cent. per annum (free of income-tax) on the ordinary or " B " shares of the company, and that the balance of £846 then remaining to be carried forward.

QUOTATIONS AT A GLANCE.

London Prices of American and Russian Refined Oil during 1905.

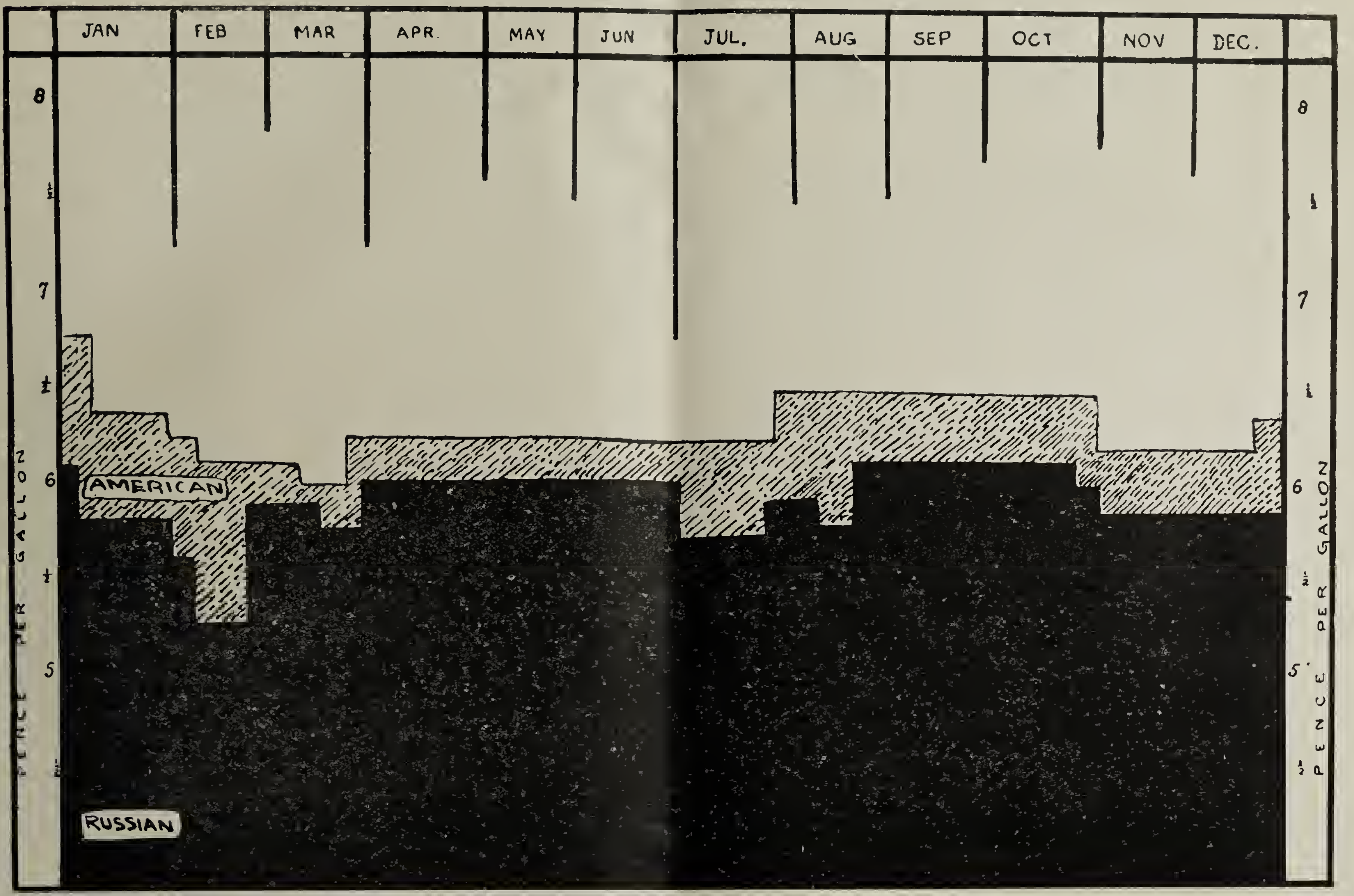


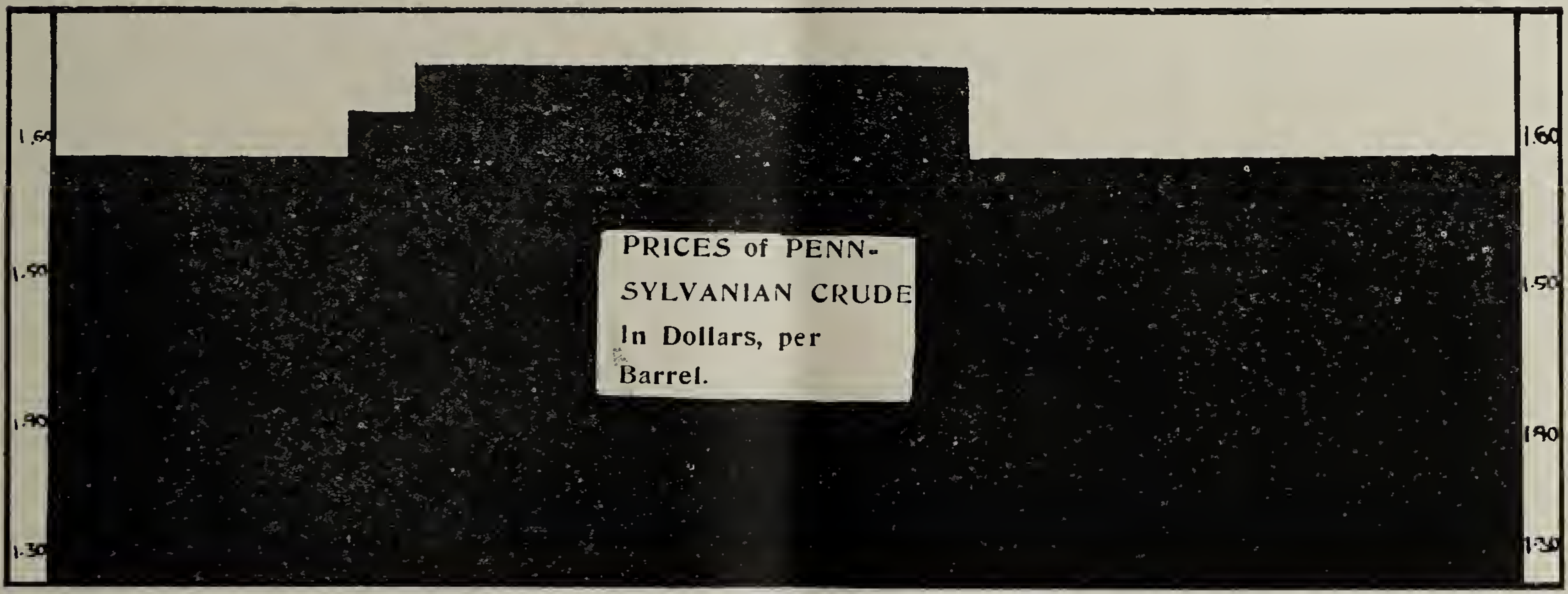

PRICES of PENNSYLVANIAN CRUDE.
In Dollars, per Barrel.

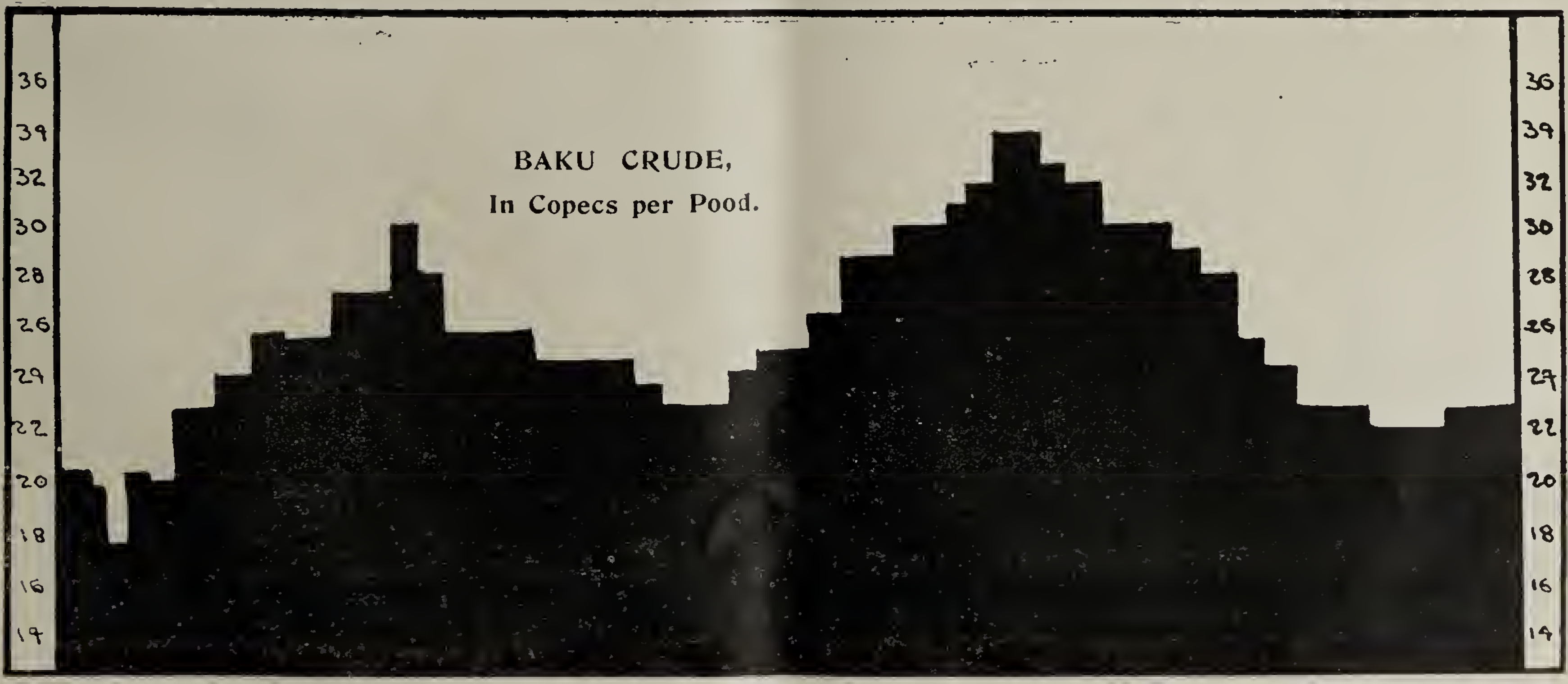

BAKU CRUDE.
In Copecs per Pood.

LONDON PRICES OF AMERICAN AND RUSSIAN REFINED OIL DURING 1906.

The Designs on this page afford an interesting comparison with the Tables opposite, shewing the rise or decline of prices during the years 1905 and 1906.







WEEKLY PRICES OF AMERICAN AND RUSSIAN PETROLEUM IN THE RESPECTIVE COUNTRIES DURING THE YEAR 1906.

AMERICAN.

Week ending.		Crude. (dollars per barrel.) Penn.	Crude. N. Lima.	Crude. S. Lima.	Refined (cents per gallon.) Bulk.	Refined New York. Cases.	Refined New York. Barrels.
January	6	1·58	0·94	0·89	4·70	10·35	7·60
	13	1·58	0·94	0·89	4·70	10·35	7·60
	20	1·58	0·94	0·89	4·70	10·35	7·60
	27	1·58	0·94	0·89	4·70	10·35	7·60
February	3	1·58	0·94	0·89	4·70	10·35	7·60
	10	1·58	0·94	0·89	4·70	10·35	7·60
	17	1·58	0·94	0·89	4·70	10·35	7·60
	24	1·58	0·94	0·89	4·70	10·35	7·60
March	3	1·58	0·94	0·89	4·70	10·35	7·60
	10	1·58	0·94	0·89	4·70	10·35	7·60
	17	1·58	0·94	0·89	4·70	10·35	7·60
	24	1·58	0·94	0·89	4·70	10·35	7·60
	31	1·58	1·94	0·89	4·70	10·35	7·61
April	7	1·61	0·96	0·91	4·70	10·35	7·60
	14	1·61	0·96	0·91	4·70	10·35	7·60
	21	1·61	0·96	0·91	4·70	10·35	7·60
	28	1·64	0·98	0·93	4·70	10·35	7·60
May	5	1·64	0·98	0·93	4·70	10·35	7·60
	12	1·64	0·98	0·93	4·70	10·35	7·80
	19	1·64	0·98	0·93	4·70	10·35	7·80
	26	1·64	0·98	0·93	4·60	10·35	7·80
June	2	1·64	0·98	0·93	4·60	10·35	7·80
	9	1·64	0·98	0·93	4·60	10·35	7·80
	16	1·64	0·98	0·93	4·60	10·35	7·80
	23	1·64	0·98	0·93	4·60	10·35	7·80
	30	1·64	0·98	0·93	4·60	10·35	7·80
July	7	1·64	0·98	0·93	4·60	10·35	7·80
	14	1·64	0·98	0·93	4·60	10·35	7·80
	21	1·64	0·98	0·93	4·60	10·35	7·80
	28	1·64	0·98	0·93	4·60	10·35	7·80
August	4	1·58	0·94	0·89	4·50	10·15	7·60
	11	1·58	0·92	0·87	4·50	10·15	7·60
	18	1·58	0·92	0·87	4·50	10·15	7·60
	25	1·58	0·90	0·85	4·50	10·15	7·65
Sept.	1	1·58	0·90	0·85	4·40	10·05	7·50
	8	1·58	0·90	0·85	4·40	10·05	7·50
	15	1·58	0·90	0·85	4·40	10·05	7·50
	22	1·58	0·90	0·85	4·40	10·05	7·50
	29	1·58	0·90	0·85	4·40	10·05	7·50
Oct.	6	1·58	0·90	0·85	4·40	10·05	7·50
	13	1·58	0·90	0·85	4·40	10·05	7·50
	20	1·58	0·90	0·85	4·40	10·15	7·50
	27	1·58	0·90	0·85	4·40	10·15	7·50
Nov.	3	1·58	0·90	0·85	4·40	10·15	7·50
	10	1·58	0·90	0·85	4·40	10·15	7·50
	17	1·58	0·90	0·85	4·40	10·15	7·50
	24	1·58	0·90	0·85	4·40	10·15	7·50
Dec.	1	1·58	0·90	0·85	4·40	10·15	7·50
	8	—	—	—	—	—	—
	15	—	—	—	—	—	—
	22	—	—	—	—	—	—
	29	—	—	—	—	—	—

RUSSIAN.

		Refined. For Export.	Refined. For Inland.	Crude.	Residuals.
		Copecs per Pood.			
January	2	—	—	20½	—
	9	—	25	20	19
	16	—	25½	17	20
	23	—	—	20½	—
	30	—	—	20	23
February	6	—	—	23½	—
	13	—	—	21	27
	20	—	—	26	27
	27	—	—	25½	27
March	6	28¾	—	25½	25¼
	13	29	—	27	28¾
	20	—	—	27½	29
	27	29½	—	30	31
April	3	—	—	28	—
	10	29¼	31¼	26	30
	17	—	—	26	—
	24	—	29½	26	28
May	1	—	—	25	—
	8	29	28	25	27
	15	—	27½	25	27
	22	28½	28	25	27½
	29	—	—	24	—
June	5	24	24	23	26
	12	24½	—	23	26½
	19	25	25	25	26½
	26	—	—	26	—
July	3	28	25	26	27½
	10	—	—	27	—
	17	—	30⅜	29	31
	24	—	—	29	—
	31	—	35	30	31½
August	7	—	—	30	—
	14	40½	40	31	33
	21	—	—	32	—
	28	40	40	34	35¼
Sept.	4	—	—	33	—
	11	40	40	32	35¾
	18	—	—	30	—
Sept.	25	—	34¾	30	35⅛
October	2	—	—	29	—
	9	—	—	28	31
	16	30	31¼	26	30½
	23	—	—	25	—
	30	29	29¾	23	29
Nov.	6	—	—	23	23
	13	—	—	23	—
	20	—	—	23	22½
	27	26¼	27½	22	24¼
December	4	26	26	22	—
	11	—	—	22	—
	18	25	—	23	24⅞
	25	25¼	—	23	24

PRICES OF AMERICAN AND RUSSIAN REFINED OIL IN ENGLISH MARKETS.

		London. American.	London. Russian.	Liverpool. American.	Liverpool. Russian.
January	5	6¾	6⅛	7½–8¾	6¾
	12	6⅜	5¾	7½–8¾	6¾
	19	6⅜	5¾	8 –8½	6½
	26	6⅜	5¾	8 –8½	6½
February	2	6¼	5⅜	7¼–8¼	6¼
	9	6⅛	5¼	7⅛–8	6¼
	16	6⅛	5¼	7⅛–8	6¼
	23	6⅛	5⅞	6⅝	6¼
March	2	6⅛	5⅞	6⅝	6¼
	9	6⅛	5⅞	6⅝	6¼
	16	6⅛	5⅞	6⅝	6¼
	23	6	5¾	6½	6
	30	6	5¾	6½	6
April	6	6¼	6	6½	6
	13	6¼	6	6½	6
	20	6¼	6	6¾	6¼
	27	6¼	6	6¾	6¼
May	4	6¼	6	6¾	6¼
	11	6¼	6	6⅜–7	5⅞
	18	6¼	6	6⅜–7	5⅞
	25	6¼	6	6⅜–7¾	5⅞
June	1	6¼	6	6⅜–7¾	5⅞
	8	6¼	6	6⅜–7¾	5⅞
	15	6¼	6	6⅜–7¾	5⅞
	22	6¼	6	6⅜–7¾	5⅞
	29	6¼	6	6⅜–7¾	5⅞
July	6	6¼	5¾	6⅜–7¾	5⅞
	13	6¼	5¾	6⅜–7¾	5⅞
	20	6¼	5¾	6⅜–7¾	5⅞
	27	6¼	5¾	6½	6
August	3	6½	6	6½	6
	10	6½	6	6½–7	6
	17	6⅜–6½	5⅞–6	6½–7½	6
	24	6⅜–6½	5⅞–6	6½–7½	6¼
	31	6½	6⅛	6½–7½	6¼
Sept.	7	6½	6⅛	6½–7½	6¼
	14	6½	6⅛	6½–7½	6¼
	21	6½	6⅛	6¾	6⅜
	28	6½	6⅛	6¾	6⅜
October	5	6½	6⅛	6¾	6⅜
	12	6½	6⅛	6¾	6⅜
	19	6½	6⅛	6¾	6⅜
	26	6½	6⅛	6¾	6⅜
Nov.	2	6½	6	6¾	6¼
	9	6¼	5⅞	6¾	6¼
	16	6¼	5⅞	6¾	6¼
	23	6¼	5⅞	6¾	6¼
	30	6¼	5⅞	6¾	6¼
Dec.	7	6¼	5⅞	6¾	6¼
	14	6¼	5⅞	6¾	6¼
	21	6⅜	5⅞	6⅝–7½	6½
	28	6⅜	5⅞	6⅝–7½	6½

THE "SHELL" TRANSPORT AND TRADING COMPANY, LIMITED.

The Amalgamation with the Royal Dutch Company Unanimously Agreed to.

An extraordinary general meeting of the shareholders of the "Shell" Transport and Trading Co., Ltd., was held at Winchester House, E.C., on Monday, noon, for the purpose of considering the following resolution:—"That the company do hereby authorise the directors to enter into such agreements as may be desirable to carry into effect the scheme for amalgamation between the company and the Royal Dutch Petroleum Co., Ltd., which has been signed by Sir Marcus Samuel and Mr. Deterding, dated September 12th, 1906, with such modifications, alterations and additions as the board may determine, and to concur in the formation of the two companies necessary to carry out such scheme, and to do all things which may seem desirable for that purpose."

Sir MARCUS SAMUEL, Bart., the Chairman of the company, presided, being supported by a full board of directors.

Mr. E. A. SMITH REWSE, the Secretary, having read the notice convening the meeting, the resolution was considered.

Sir MARCUS SAMUEL, in proposing this, said:—

When we last had the pleasure of meeting the shareholders I foreshadowed the conclusion of an agreement for the amalgamation of the interests of this company and of the Royal Dutch Petroleum Co., Ltd., the principles having been agreed at a meeting at The Hague in July, between a committee of our board and the board of the Royal Dutch. A provisional agreement had been actually signed by Mr. Deterding, managing director of the Royal Dutch Petroleum Co. and by myself. A vital preliminary was the investigation of the properties and of the liabilities of the respective companies, and I am happy to say that these, as was to be expected, are proving satisfactory to both parties, and the agreement has accepted in principle by both boards, so that, subject to the settlement of necessary detail and to the formal consent of the shareholders of both companies, we may hope to see the scheme carried to completion on or before the 31st March.

In order not to lose the great advantages accruing from the very moment of joint working, steps are already devised which will make this come into operation for practical purposes from the 1st January, 1907, although the accounts must be kept in such a fashion that should, by any chance, the amalgamation not be carried through, an adjustment between the companies will be feasible.

Before giving you the actual details of the agreement which has been open for inspection by shareholders at the offices of the company for the last 10 days, I will point out to you the principal reasons why an amalgamation between the two companies is a matter of urgent necessity to both.

The Nederlandsch Indische Industrie en Handel Maatschappij, owned by the "Shell" Co., have erected at enormous cost a refinery capable of treating at least 12,000 tons of crude oil per week, together with adequate storage. They in common with other contracting producers, market their oil through the Asiatic Petroleum Co., Ltd., in which the "Shell" Co. hold one-third of the shares the Royal Dutch Co. one-third, and Messrs. Rothschild and their friends one-third.

The quantity of oil deliverable to the Asiatic Co. by each party is limited by agreement, and the minimum quantity which the Nederlandsch Indische is entitled to supply would not suffice to keep the refinery at full work.

The Royal Dutch Co. have developed a production of oil of their own in Koetei adjoining our territories, which if they wanted to refine upon the spot, would necessitate the erection by them of a refinery, storage and tankage at great cost, and which would be a useless duplication of the already existing facilities.

Although selling through the same medium, the two companies are still practically competing with one another, since their interests constantly conflict. The Royal Dutch have erected a plant which is turning out about 500 tons of paraffin wax per month, and the product is finding a ready sale. This plant is, however, erected in Sumatra, whereas the oil containing the most valuable paraffin is produced in Borneo. Whether this amalgamation goes through or not, the "Shell" Co. intend to forthwith erect a plant capable of turning out 1,000 tons of paraffin wax per month, experience having shewn beyond any possible doubt that the crude oil available for this purpose is forthcoming. Failing an amalgamation, the Royal Dutch would also erect a plant in Koetei, and there would be constant competition and friction between the two companies, nor would such competition end with this one product, since owing to scientific investigation, most valuable properties have been discovered in our Borneo benzine, and certain plant has to be erected to treat it, and here again we should find ourselves in competition with our associates. The great experience acquired by the Royal Dutch in their experimental work leads us to frankly recognise the value of their co-operation.

The union between us as it exists at present is a terminable one.

It was made originally only for 20 years, and a sufficient period has already expired to cause the directorate of both companies to consider what is to happen at the end of the time; and with such a question perpetually before one, it is very obvious that the interests of the business as a whole suffer to an extent which can only be realised by those practically conducting it. This has weighed with overwhelming force in inviting the shareholders of both companies to consent to the amalgamation upon the lines now proposed.

These are briefly, that new companies will be formed for the purpose of acquiring (with certain exceptions) the entire assets and undertakings of the Royal Dutch Co. and the "Shell" Co. as on the 1st January, 1907.

The Royal Dutch is to have an interest of 60 per cent. in the new company or companies, and the "Shell" Co. an interest of 40 per cent., and those companies are to have the right of nominating directors of the new company in proportion to their interests.

The new company is to have a working cash capital of £500,000, which is to be provided by the Royal Dutch Co. and the "Shell" Co. in the proportion of 60 per cent. and 40 per cent.

The new companies are to issue to the two vendor companies as part consideration for the sale, fully paid ordinary shares to the nominal value of about ten millions sterling, 60 per cent. of these shares being issued to the Royal Dutch and 40 per cent. to the "Shell" Co.

The assets of the Royal Dutch and the "Shell" Co. are to be transferred to the new company free from all encumbrances.

All cash and cash investments outside the business belonging to the Royal Dutch Co. and the "Shell" Co., and all book debts and other amounts due, or to become due, to those companies, in respect of any period prior to the 1st January, 1907, are exempted from the sale.

Notwithstanding that each of the vendor companies is to discharge all its own liabilities as on the 31st December, 1906, special exception is made in respect of certain liabilities of the "Shell" Co. and of the Nederlandsche Indische Industrie en Handel Maatschappij which are agreed as amounting on the 31st December, 1906, to about £285,000, and this is to be liquidated in the following manner:—The new company is to pay to the "Shell" Co. interest at the rate of 5 per cent. per annum on this amount, but the "Shell" Co. is to itself discharge out of its share of the profits the sum of £285,000 by applying one-half of all dividends received by it from the new company in excess of £150,000 per annum in respect to the first ten years' working until the amount of £285,000 is wiped out, but should the dividends received from the new company in this form not suffice to extinguish that sum during the first ten years, the new company is to itself discharge any balance remaining at the expiration of that period.

The new company take over at agreed prices the whole of the stocks and materials belonging to both companies, as well as any outstanding policies of insurance or assurance.

The new company will indemnify both the "Shell" Co., Messrs. M. Samuel and Co. and the Royal Dutch Co. in respect of any consequences arising through any breach of the agreements under which the properties are held.

Notwithstanding that the power of the management of the business will be in the hands of the Royal Dutch, it is expressly provided that no further capital is to be created or issued, and no fresh parties shall be admitted as shareholders except with the consent of four-fifths of the directors.

It is also provided that in the event of the liquidation of the new company, or its sale as a going concern at any time before the 31st January, 1932, notwithstanding that the shares are held in different proportions, the net proceeds up to an amount of nine millions sterling shall be divided equally between the Royal Dutch and the "Shell" Co., and the balance only to be divided in the proportion of the shares held by each company.

As a consideration for giving the Royal Dutch the practical control of the business, it is expressly provided that for a period of ten years from the 1st January, 1907, the first £375,000 of profits available for dividend in each year shall be dealt with as follows:—

(1) The first £50,000 is to go the "Shell" Co.
(2) Then £12,000 to the Royal Dutch Co.
(3) Then £100,000 to the "Shell" Co.
(4) Then £213,000 to the Royal Dutch.

making a total of 60 per cent. of £375,000 to the Royal Dutch, and 40 per cent. to the "Shell" Co. Any deficit in the payment of this 60 per cent. to the Royal Dutch or 40 per cent. to the "Shell" Co. in any year or years is to be made up out of the surplus profits of subsequent years before any further dividend beyond the £375,000 is payable.

The Royal Dutch is to purchase and pay for, as on the 1st January, 1907, 500,000 ordinary shares of £1 each in the "Shell" Co. at 30s. per share, ex 5 per cent. dividend for 1906. The Royal Dutch undertakes not to part with any of these shares without the consent of the board of the "Shell" Co.

I believe the concise details which I have thus given will enable every shareholder to grasp the bearing of the combine, and I wish distinctly to declare that it is a defensive and not an offensive alliance, but it must be quite obvious that we are in a better position to make treaties or to conduct our own defence, when acting in perfect unison, than when we are obliged to consider conflicting interests.

There are two points which require explanation. The first is the item of £285,000, the remaining liabilities of the "Shell" Co., which arise, of course, principally from the fact that we have undertaken to find £200,000 of new working capital for the combine, but I think it will be a source of great gratification to the shareholders to find that the financial position of the company is so sound as to have enabled them to discharge the whole of their outstanding liabilities out of their own resources with the exception of about £150,000. It is quite impossible for us to state definitely the amount of the "Shell" Co.'s requirements until the books for 1906 are made up. They will probably amount to £350,000, but upon this, as to £285,000 they receive 5 per cent. interest from the new company, and I do not think I am at all sanguine in predicting that, without unduly trenching upon our dividends, we shall be able to discharge this debt in a very short time. The directors have made arrangements to borrow the sum required as an ordinary debt at 5 per cent. per annum, to be repaid at the convenience of the company.

The next point is that the preference shareholders obtain for a period of ten years a prior right to their dividend on the earnings of the whole combine, whilst they have, of course, in perpetuity the first claim upon the share of the "Shell" Co. The ordinary shareholders of the "Shell" Co. also receive a dividend of 5 per cent. per annum in priority to the shareholders of the Royal Dutch—this being a necessary guarantee that the business will be properly conducted by the *personnel* of the Royal Dutch in the interests of all concerned.

Your directors have given the most careful consideration to the scheme as a whole, and whilst they have been naturally reluctant to sink the independence of the "Shell" Co., yet there is no alternative before them in the interests of their shareholders but to recognise that as their supplies of oil are obtained from territory under Dutch jurisdiction, it is sounder policy to amalgamate those interests with those of other Dutch producers enjoying the confidence and aid of their Government, and I therefore ask you to pass the resolution which we have invited you to, authorising your directors to take all the necessary steps to complete the amalgamation with the Royal Dutch Co,

Mr. R. JARDINE seconded the motion.

Mr. ARTHUR BRANDT asked what would be the position of the preference shareholders as to capital. Would they retain that same preference as to the capital that they had at present?

The CHAIRMAN: Exactly the same. The "Shell" Co. will remain a standing company, only it becomes a holding company, with all its stock in the other company. I think the position of the preference shareholders is a magnificent one under this scheme. Although I am a large holder of ordinary shares, we have paid special attention to the interests of the preference shareholders, and in securing them 5 per cent. of the earnings of the whole of this £10,000,000 of capital, it puts them outside the category of an ordinary trading company. It is a very fine position.

Another GENTLEMAN enquired if the preference shares would have a first charge on the assets of the two combined undertakings in perpetuity.

Sir MARCUS SAMUEL replied in the negative. The first charge would only be on the "Shell" Co.'s share.

The resolution was then put to the meeting, and carried unanimously.

Mr. DELMEGE, in proposing a hearty vote of thanks to the chairman and directors for the able manner in which they had carried through the scheme, said he did not think that anyone could have any idea as to the enormous amount of detail work which the transfer had occasioned, and which still remained to be done. He, personally, felt very much indebted to Sir Marcus Samuel for the manner in which he had conducted the negotiations, and also to the directors for the work which they had done. He was sure that instead of getting 5 per cent in the future they would very likely get 10 per cent.; indeed, considering the position they were in, he was of the opinion that the shareholders would get very good dividends indeed on their shares.

Mr. JASPER YOUNG seconded the motion, which was unanimously received.

The CHAIRMAN, in replying, said he was rather surprised it had not occurred to anybody to ask what the financial result of this operation would be. They had circulated, as they promised they would, the balance-sheet of the Royal Dutch Co., and he thought any business man would agree with him that it was a very remarkable one. They would see that they had written down the bulk of their assets to an absolutely nominal amount, and they shewed, after doing that and writing off in a way which he did not think any British company would ever dream of doing, there was divisible balance of 8,000,000 florins, or £500,000 The "Shell" Co. distributed last year among their preference and ordinary shareholders £150,000, so that, whichever way they looked at that, it was a most excellent business for the "Shell" Co., and, as he had said before, he thought it would prove equally so for the Royal Dutch. That the combined companies had before them a period of great prosperity he had not the slightest doubt. He quite agreed with Mr. Delmege, and he would be very disappointed with the results if the "Shell" Co. were not able to pay permanently much higher dividends than they had paid up to now.

LATEST NEWS FROM GROSNY.

The executors of Mr. Maximoff have recently effected the purchase of Mr. Kuzmin's plot No. 26, situated in the eastern part of the Grosny oil fields, and which has for a long time been lying absolutely idle. The deepening of the well started by Mr. Kuzmin will be taken in hand at once, and a new well is to be laid down. On the adjoining plots of the Grosny Oil Co., recently taken over by the Spies Petroleum Co., two partly damaged wells are yielding about 2,000 poods of crude oil per 24 hours. The repair of two other damaged boreholes will be begun almost immediately. At the time of writing the erection of dwelling houses is practically completed.

The Moscow Co., which owns a plot adjoining that of No. 26, is proceeding to drill the two boreholes.

There are no new spouters to record in the eastern part of the fields, and, at the same time, the old spouters have decreased their output.

On the Ermoloff plot of the Akhverdoff Co. five wells are being deepened, whilst on the neighbouring plot, No. 7, of Alkhan-Yurt Co. two wells are going further down. It may now be expected that the production of the eastern part of the fields will increase during the first half of 1907.

The annual meeting of the Grosny Petroleum Association has been postponed until the 25th of January (o.s.).

BATOUM PETROLEUM SHIPMENTS.

The shipments of petroleum products from Batoum during the week ended 9th December, o.s., were as follows:—

	Illuminating Oil.		Other Products.	
	1905.	1906.	1905.	1906.
To Europe ..	411,000	213,000	—	194,000
To the East ..	—	370,000	—	—
To Russian Ports	1,000	1,000	6,000	2,000
From Jan. 1st to Dec. 9th:—				
To Europe ..	19,602,000	11,206,000	8,248,000	8,164,000
To the East ..	9,300,000	7,873,000	367,000	59,000
To Russian Ports	2,462,000	2,876,000	220,000	249,000

THE PETROLEA COMPANY OF GALICIA.

OPERATIONS DURING 1905-6.

The Petrolea Actien Gesellschaft füer Mineraloelindustrie, which is the joint selling organisation of the bulk of the Galician crude oil producers, has just published its report for the financial year 1905-6, from which the following interesting particulars concerning the general condition of the Galician petroleum industry are taken.

After the continuous rise in the Galician crude oil production observed in the two preceding years, the year 1905-6 brought a decline in the production, and the crude oil deliveries to the Petrolea fell from 655,300 tons in 1904-5 to 570,000 tons in the financial year 1905-6. The deliveries to the refiner, who used up the stocks at their works, at the same time rose from 386,000 tons in the financial year 1904-5 to 555,000 tons in 1905-6. The incoming quantities were thus practically covered by the outgoings, and the stocks of crude oil on the 30th April, 1906, amounting to 520,180 tons, after deducting loss by leakage, shewed an increase of only 3,000 tons against the stocks on 30th April, 1905. The company were therefore not in a position to make full use of the 22 tanks built in the year 1950-6 having a capacity of 100,000 tons. Of the stock in hand on the 30th April, 1905, on 302,860 tons the company had made advances to the extent of 7,035,177 kronen.

Toward the close of the year a considerable number of the boreholes laid down at Tustanowice became productive, which resulted in a further restriction of operations at Boryslaw, and a still greater boring activity in Tustanowice. The firms, which have newly become producers, delayed joining the Petrolea so that the "outsiders" production increased considerably. The notice of termination of its commission agreement given to the company on the 31st December, 1905, by one of the firms under agreement with it, gave the impetus to the strenuous efforts to consolidate the crude oil organisations, avoiding, if possible, the abrogation of the existing commission agreements. This attempt proved useless, so that the board of directors found themselves compelled to abrogate all the commission agreements as from the 30th April, 1906. This abrogation was made possible by the fact that the so-called second addition to the rules, which raised the charge for storage from 12 to 18 heller (per 100 kgs.), and the commission from 2 to 3 per cent., at the same time extending the company's obligations as to acceptance of crude oil, was not accepted by all the producers under the agreement, including several of the larger combined producing and refining firms. By this notice it was intended, on the one hand, to prevent the Petrolea finding itself, at the dissolution of the refiners cartel, which was to take place after the 30th April, 1907, with a large and too highly-burdened stock, and, on the other hand, this dissolution was intended to bring pressure to bear on the outsiders. Simultaneously with the abrogation of the commission agreements a provisional arrangement was concluded for a period of two months, during which the advances on crude oil were continued at the same rate as before, *i.e.*, 2·25 kronen per metric centner, in order to assure to the producers the freedom to take part in the fresh negotiations which were then immediately commenced. These negotiations by the 18th May, 1906, had led to an agreement in principle between the Petrolea, on the one part, and the producing and refining firms as well as the purely refining firms on the other hand, and on the basis of this agreement in principle the new rules were worked out, and the text of the same was, after protracted negotiations with the Drohobycz committee of producers, finally agreed upon by the 19th July, 1906. The provisional arrangement was thereupon, for the purpose of getting the signatures, prolonged to the 30th September. During the interval conditions arose which, for the purpose of perfecting the new commission agreement, made it necessary to assure higher advances to the purely producing firms.

Storage Accommodation at Boryslaw Station.

The Kreditanstalt füer Handel und Gewerbe, of Vienna, resolved on their part to guarantee the higher prices and entered itself into direct negotiations with the producers. These negotiations led to a favourable result on the basis of a maximum rate of advance of 2·75 kronen per metric centner. More than 80 per cent.

of the producers have already signed the new commission agreements with the Petrolea, which commission agreements have in the meantime come into force. The means necessary for making the advances on the crude oil the Petrolea receives from the Kreditanstalt füer Handel und Gewerbe, of Vienna, under a financial arrangement arrived at with the said bank, under which the Kreditanstalt, in return for the participation in the surplus price accorded to it by the producers, bears the whole risk of these advances. The Petrolea will, during 1906-7, be able to liquidate the whole of its former advance engagements and thus be entirely freed of all the risks of the advance business. The conclusion of new commission agreements with the firms, who are both producers and refiners, the report further says, is now under negotiation, and there is good reason to expect that the crude oil organisation will in a short time be arranged in such a manner that it may succeed, in view of a declined output and an increased sale, to realise such selling prices which will enable the crude oil producers to work without loss.

From those producers, who have entered into the new commission agreements with the Petrolea, the company is seeking to obtain a recognition of the higher charges of 18 hellers and 3 per cent. retrospectively for the period since the 1st January, 1905, up to the 30th April, 1906, in which in most cases it has already been successful, so that under this head no considerable loss should result.

Having regard to commission agreements already concluded or still to be concluded, the directors propose for the present year to satisfy themselves with a normal amortisation, and thus be able to propose the distribution of a dividend of 5 per cent.

The net profit of the Petrolea, amounting to 118,096 kronen approximately, corresponds with last year's (116,898 kronen). The gross receipts exceeds those for last year by a very considerable sum, as will be seen from the following figures:—Storage charges yielded 1,254,558 kronen (last year 1,094,572 kronen); interest, 106,326 (73,674) kronen; transport charges, 495,358 (271,816) kronen. On the other hand, the expenditure has also increased. Rent took up 608,943 (544,148) kronen; insurance and expenses, 104,691 (42,191) kronen; ground rent, 44,950 (51,003 kronen); interest and depreciation, 580,830 (320,886) kronen). The general expenses are summarised as follows:—Trade expenses, 369,220 (348,182 kronen); and taxes, 23,500 (16,754) kronen. In the balance sheet, debts receivable figure at 8,294,070 (7,584,804) kronen, of which 8,165,645 kronen represent advances on crude oil. Creditors, on the security of crude oil, figure at 6,378,785 (5,991,502) kronen; in current accounts, 1,139,232 (1,255,578) kronen; bills payable, 2,248,200 (1,393,600) kronen. The tanks amortisation account stands at 733,403 kronen (273,600 kronen). Tank installations and materials stand at 4,713,186 (3,257,669) kronen.

Jennings Continues to Decline.—The output of the Jennings field during the first half of last month was estimated at about 13,000 barrels daily, as against 17,000 barrels a month previous. The Jennings-Heywood Oil Syndicate possesses half of the stocks in the field, theirs being placed at little less than 1,000,000 barrels.

MESSRS. H. E. MOSS AND CO.'S STEAMSHIP CIRCULAR.

Messrs. H. E. Moss and Co. have issued their semi-annual steamship circular with their usual promptitude. In this they state that the year just closed has been disappointing to the majority of steamship owners, for, although the great British and continental passenger and cargo lines have done remarkably well (notably the German companies), most tramp owners have made but a moderate return, and that only with modern and up-to-date steamers. This depression in shipping is all the more tantalising seeing the enormous profits that are being made in almost every other branch of industry at home and abroad, and the ever increasing volume of trade all the world over, which is gradually absorbing our surplus tonnage, and is bound to react shortly on the shipping industry.

The improvement looked for, and which was predicted in June last, has been slow in shewing itself, and has been retarded by almost a second record year of shipbuilding coming simultaneously with the increased carrying power allowed by our Board of Trade, which alone added what we estimate to be nearly equal to a year's production of new tonnage to our mercantile marine.

In spite of this great addition to our tonnage, there are practically no steamers laid up, all are employed. Our own imports and exports alone will shew this year an increase of about £180,000,000 compared with six years ago. Trade at home, abroad, and especially in America is booming, and has every appearance of continuing, and new spheres are opening up in the Pacific and elsewhere. Taking all this into account, and the gradual decrease in the building of tramp steamers, we look forward with every confidence to the year 1907 being a more prosperous one for steamship owners, who are bound to participate in the general prosperity of the world.

Orders for new steamers have for some time past been very scarce, except for special boats for regular lines, and many builders who are already short of work, have recently booked contracts at prices that shew no profit, and in many instances a loss. The cost of production has, moreover, recently increased greatly. Within the last month steel, coal, and everything connected with shipbuilding and machinery have advanced considerably, and we are convinced will still further increase during the coming year. New steamers of 6,000 to 8,000 tons to-day cost to build fully £1 per ton deadweight more than a year ago, and smaller vessels more in proportion. Vessels already under contract can be bought at present in many instances cheaper than they can be built for.

Freights, taking them all round, shew an improvement on last year, and are bound to follow the upward movement in the general prosperity.

Baku Spot Prices.—According to the official statement of the Baku Exchange Committee, the average spot prices of various petroleum products at Baku in October were:—Crude oil delivered at Balakhany 24 copecs per pood; residuals in ships, 28·8 copecs; kerosene, 29·8 copecs.

MISCELLANEA.

THE CAMPINA BORING SCHOOL.

The School for Boremasters at Campina, in Roumania, has now entered upon the third year of its existence In the first year 67 pupils were successful in passing the last examination, and the Minister of Domains, in accordance with the law, issued diplomas of boremasters to them.

In the second year the theoretic course of the school was gone through by a large number of pupils. These pupils are now going through the practical course, and in February will pass their final examination and receive their diplomas.

During the third year 25 pupils were admitted into the school, of which 15 were under the patronage of the State and 4 were supported by petroleum companies.

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THE BURMAH OIL COMPANY.

NEW ISSUE OF CAPITAL.

A circular has recently been issued to the shareholders of the Burmah Oil Co., Ltd., stating that the question of transport of the company's crude oil from the wells of the refineries in Rangoon—a distance of some 300 miles by means of a pipe line—has been under consideration for a number of years past, the transport having hitherto been accomplished by flats towed by steamers on the River Irrawaddy. The feasibility of pipe transport has been demonstrated by the construction, as a trial, of some 40 miles of pipe connecting the outlying fields with the original field, and a line laid from the discharging station of the flats at Rangoon to company's refineries. Both these sections have now been working satisfactory for about 2½ years. The directors have obtained a concession from the Government for the construction of a line to connect the up-country and Rangoon sections, and to provide the necessary funds they propose to issue the 25,000 6 per cent. cumulative second preference shares of £10 each which are still unissued. These shares are accordingly offered for subscription by the shareholders.

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LIQUID FUEL FOR ITALIAN RAILWAYS.

The experiments carried out in Italy for the employment of petroleum as fuel for the railways have yielded excellent results. Negotiations are now in progress between the Italian Minister of Finance and the Administration of the Italian railways with a view to arranging, if not for complete exemption from duty of the fuel oil required by the railway, at least for a substantial reduction in the duty. In well-informed Italian circles it is believed that complete exemption from duty will be granted.

The Roumanian petroleum producers, having regard to the proximity of the Roumanian oil fields to Italy and the growing commercial relations between the two countries, are confident that, in the event of liquid fuel being adopted by the Italian railways, Roumanian oil will secure this new important outlet.

THE BRITISH COLONIAL PETROLEUM CORPORATION, LIMITED.

A company bearing the above title was registered on the 20th December by Gilbert Samuel and Co., 16, Great Winchester Street E.C. The capital is £200,000, this being divided into £1 shares. The objects of the company are to acquire from the Nigeria Investment Co., Ltd., its assets and undertaking, to prospect for, open, work, explore, develop and maintain petroleum, oil, asphalt, bitumen and other properties, and to render merchantable and to deal in the products thereof. The minimum cash subscription is 10 per cent. of the shares offered to the public. The first directors (to number not less than three nor more than seven) are to be appointed by the signatories. Qualification, £250. Remuneration, £200 per annum (chairman, £100 extra), and 10 per cent. of the surplus profits, after 10 per cent. has been paid on the ordinary shares, divisible.

◆

EXTENSION OF THE KENTUCKY OIL FIELD.

IMPORTANT STRIKES.

Writing to the *Manufacturers' Record* from Barboursville, Mr. W. S. Hudson states that some important discoveries have recently been made in Kentucky, which have considerably widened the drilling area, and as a consequence much wildcatting is proceeding. One of the most promising of the newly-opened districts is in lower Wolfe county, where the Mountain Valley Oil Co. of Lexington have developed a good well, which had an initial production of 75 barrels daily. In Clinton county, another undeveloped field has been unearthed by the the New Domain Oil and Gas Co., and at the present time a series of wells to further test the western section of the county are being pushed forward with. There are now no less than eleven established fields in Kentucky, and the extended tests which are under way indicate a most healthy condition of things in that region.

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AMERICA'S PARAFFIN WAX EXPORTS FOR OCTOBER.

The exports of paraffin wax from America during October were as under (in pounds), as compared with the corresponding period last year:—

Exported to—	1906.	1905.
United Kingdom	6,128,827	10,157,329
Belgium	38,286	5,460
France	110,580	58,987
Germany	906,480	1,633,679
Italy..	2,380,323	852,033
Netherlands	376,681	825,862
Other European Countries ..	574,180	448,508
Central America and British Honduras	41,586	90,953
Mexico	1,021,200	737,088
Other South American Countries	129,927	60,570
Japan	83,890	491,504
British Australasia	—	273,700
Other Asia and Oceanica ..	221,370	80,009
British Africa	260,345	143,888
Other African Countries	105,500	—
Other Countries	500	9,825
Totals	12,388,675	15,869,395

LATEST QUOTATIONS OF PETROLEUM SHARES.

ENGLISH COMPANIES.

This list is restricted to companies who have paid dividends or who are producers.

Company	Capital Paid Up.	Value of Shares.	Latest Prices.
Assam Oil	£205,000	£1	⅝-¾
Baku Russian Petroleum ..	£750,000 Ord.	£1	2/0-2/6
,, ,, ..	£650,000 5½% Pref	£1	4/0-4/6
Bibi-Eybat Petroleum Co. ..			8/6-9/6
Californian Oilfields	£250,000 Ord.	£1	5-5¼
Commonwealth Oil Co. Pref	10/- paid up		$\frac{9}{16}$-$\frac{11}{16}$ pm
,, ,, Def..	£1 fully paid		2⅝-2¾
European Petroleum.. ..	£550,000 Pref.	£1	1/6-2/6
,, ,, ...	£550,000 Ord.	£1	0/6-1/6
,, ,, ...	£376,000 Deb.	£100	80-83
Russian Pet. & Liquid Fuel ..	£500,000 6½% Pref	£1	10/9-11/3
,, ,, ...	£600,000 Ord.	£1	10/3 11/3
Schibaieff Petroleum ..	£575,000 6% Pref.	£5	2⅜-2⅝
,, ,, ...	£575,000 Ord.	£1	6/9-7/9
Shell Transport & Trading ..	£2,000,000	£1	29/0-30/0
,, ,, ,, ..	£1,000,000 Pref.	£10	9⅜-9⅝
Spies Petroleum Company ..	£312,500	10s.	9/3-10/3

SCOTCH COMPANIES.

Supplied by Messrs. Maclean and Henderson, Stirling.

Company.	Capital Paid Up.	Value of Share.	Latest Prices.
Broxburn Oil Co., Ltd., Ord. 8½ pd	£199,750	£10	23
Do. 6% Cum. Pref. ..	£100,000	£10	$12\frac{7}{16}$
Burmah Oil, Ord.	£1,100,000	£1	57s. 6d.
Do. Pref.	£250 000	£1	25s. 9d.
Dalmeny Oil Co., Ord. (7 paid) ..	£37,800	£8 10s.	7
Do. 5% Pref. ..	£18,900	£7	5
Oakbank Oil Co., Ltd., Ord. (fy. pd.)	£45,000	£10	43s.
Do. New (£8 10s. pd.)	£131,750	£10	42s. 6d.
Pumpherston Min. Oil Co., Ld., Ord. (17s. paid)	£110,500	17s.	6½ 12¾
Do. 6% Cum. Pref.	£100,000	£10	
Tarbrax Oil Co., Ltd. Ord. (£1 pd.)	£38,350	£1	38s. 6d.
Young's Paraffin Co., Ltd., Ord. ..	£452,808	£4	81s. 0d.
Do. "B" Deb...	£150,000	£100	180

RUSSIAN COMPANIES.

Company	Nom. Value in Roubles.	Quotations on December 31st.	
		Lowest Roubles.	Highest Roubles.
Baku Naphtha Co.	100	560	563
Balakhany Naphtha Co.	250	—	—
Caspian Society	1,000	4,500	4,525
Melikoff, A. C.	250	—	—
Mirzoeff Bros.	250	—	—
Naphtha Co. "Kavkas"	250	—	—
Naphtha Trading Co., A. I. Mantacheff & Co.	250	160	162
Neft Co.	250	170	—
Nobel Bros.	5.000	10,000	10,100
,, ,, ...	250	477½	482½
Rops and Co. V...	250	250	—
Russian Naphtha Co.	250	113	—
Tociety Mazout	250	—	—
Vumaieff & Co., J. G.	250	—	—
Solga-Caspian Naphtha and Trading Co.	250	—	—
,, ,, ,, (Second Issue)	250	—	—

DUTCH COMPANIES.

Company.	Latest Quotations	Former Quotations	Florins.
Arnhemsche Petroleum Mij. ..	—	—	1,000
Aurora ,, ,, (Deb. 5%)	93¾	93¾	—
Campina Poiana Mij...	—	—	—
Dordtsche Petroleum Mij. (Pref.) ..	127⅞	128⅜	500
,, ,, ,, (Deb. 4½%)	101½	101½	1,000
Gaboes ,, ,, ...	—	—	—
Holl. Rumeensche Petroleum Mij...	33½	33½	1,000
Int. Rum. Pet. Mij.	106¾	106¾	500
Java Petroleum Mij. (Ord.) ..	—	—	1,000
,, ,, ,, (Pref.) ..	—	—	—
Koninklyke Nederl Pet. Mij. Shares	701	701	250-1,000
,, ,, Share certificates	700½	710½	1,000
Mœara Enim Petroleum Mij. ..	133⅛	133⅛	100
,, ,, 1-1,000 Oblig. 5	101½	101½	250-1,000
"Moesi Ilir" Petroleum Mij. ..	43	43	—
Nederl.-Rumeensche Petroleum Mij.	$16\frac{5}{16}$	$16\frac{5}{16}$	—
Nieuwe Ned. Petroleum Mij. And...	—	—	1,000
Oliebronnen in Hannover Mij. ..	149¾	149¾	—
,, ,, (Deb. 5 %)	98	98	—
Panolan Maatschappij Cert. ..	355	355	—
Perlak Petrol. Mij. (6% cum. pr. A.) ..	149½	149½	1,000
,, ,, (Common) ..	127	127	—
Sumatra-Palemoang Petroleum Mij	75¾	75¾	50
Zuid Perlak Petrol. Mij. (Pref.) ..	122½	122½	—

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Saturday, January 5th, 1907.

THE YEAR THAT HAS GONE.

A MOST eventful year has come and gone, and now at the dawn of another, which promises to be even more auspicious, it is only fitting that we should preface our remarks on this occasion by wishing every reader in every field where oil is produced; in every refinery where petroleum is refined which gives us the means of lighting our homes or keeping our wheels well oiled; and on every ship that brings these industrial necessities to our shores, a most sincere and hearty wish for prosperity during 1907.

We doubt if ever there was a year during which the petroleum industry as a whole has shewn such signs of active life as has been the case during the year which has just closed. After years of steady progress in almost all parts of the world, the petroleum industry has, during the past twelve months, taken a pronounced step forward, and at the present time it occupies a more important place in the commerce of nations than it has ever done in the past. No matter where we look, we cannot but be impressed with the determined efforts which have been put forward, especially during 1906, in order that the petroleum industry may take full advantage of the opportunities that occur to assist it to increase in its importance. In spite of the fearful mistakes that have been made in the past from a financial aspect, the confidence of investors everywhere excepting England is being re-established in petroleum enterprises, and as a consequence the march of progress continues at an all increasing rate.

On the Continent we find the leading financial houses are not slow to recognise the great openings that exist for the investment of capital, and now, just twenty-two years ago since the great French house of the Rothschilds took up an active interest in the Russian fields, we see the culmination of an arrangement by which a well-known German banking house gives its co-operation to a European distributing organisation, which will include Great Britain in its sphere of operations. Upon this important step we will dwell in our next issue.

In America, too, almost unlimited capital has come forward within the past year to assist in opening up a new era of prosperity for the American producing fields. From the innermost producing portions of the American Continent, some 400 miles of trunk pipe line are to be laid in order that the ever-increasing production from new and prolific sources may find a ready market, while in that same portion of the Western hemisphere we see the completion of a scheme which brings the Califoraian product thousands of miles nearer the European markets, for the closing months of the year registered the completion of a work which has in effect cut Central America in two—we refer to the Panama pipe line.

The same healthy relation of capital toward petroleum developments has strikingly manifested itself in the Dutch Indian fields, where an amalgamation of a most important nature between the Dutch operating company of the "Shell" Transport and Trading Co. and the Royal Dutch Petroleum Co. There, in the Far East, the enormous opportunities which present themselves are fully recognised, and consequently in a very short time, a most carefully thought out scheme will be pushed toward realisation by the new amalgamation of interests, the result of which will go a long way to strengthening the claims of Dutch India as a producing and refining country.

Having said this much upon the financial aspect of the present trend of events, we will content ourselves by dismissing this phase of the subject with the comment that at last capital appears to be subservient to the needs of the petroleum industry, and is at its back in every part of the world ready to be called upon at the very moment when needed.

Turning then to other changes which have overtaken the oil industry during the past year, these have, for the most part, been more of an economic character than anything else. The Russian fields have shewn little or no new developments, one of the greatest changes being in the continued gradual disappearance of the spouter, and the predominance of the baled well. The commencement of 1906 saw the Caucasus in a complete state of unrest. Racial feeling ran strong, and the petroleum trade was for a time in the throes of a crisis from which it is only just recovering. But the deeds of the past have carried their lesson, and to-day the Government—unmindful as it is of many matters—is paying such attention to the needs of the petroleum industry as augur well for the future. It may, of course, be a long time ere the Russian oil trade regains the ground it has so foolishly lost during the year. Its case oil trade has all but departed, and its petroleum exports have fallen to a deplorable position, but with a good pull, and a strong pull, we hope again to see that vast mineral wealth of the Caucasus explored for the benefit of humanity at large to an even greater extent than has been the case in by-gone days.

In Roumania and Galicia, too, the New Year opens with great promise. The advent of large sums of foreign capital has taught the Roumanian that the value of his territory is appreciated abroad more than at home, and to-day we see the most energetic search ever known in that country being pushed forward as speedily as possible. In fact the progress of Roumania has been such that as a producing country it now takes its position above Galicia, where of late matters all round have not been so satisfactory as could have been desired.

The past year also has been a most momentous one in the American fields. While some territories have, in accordance with the natural order, diminished in their production, developments in virgin fields have been such as to bring about a surplus of oil above demand, which is unparalleled in oil history. The fact that America's production during last year will not equal that of 1905 is accounted for simply by the lack of demand for the product, and, consequent upon this, large numbers of wells in the Kansas and California fields have been purposely shut down until an outlet can be provided for the oil. The major portion of this oil is of the fuel description, aud so it is to efforts to extend the markets in this direction that we must look for future progress. Much has already been done in this respect. Oil fuel has gained the day upon the Pacific and Atlantic coasts of America, while in our own country we see that it continues to make sure if slow progress. The attitude and assistance ot the British Admiralty toward liquid fuel has done much to give oil a filliip for power purposes which it has long needed, and we are not without hope that in time to come it will play a far more important part as a power agent in our factories than it does to-day, now that almost unlimited supplies can be assured at fairly favourable prices.

But we have said sufficient to shew that the petroleum industry is advancing, and that rapidly, and the developments which have taken place during the year that has gone, form as it were but the shadow of those which will doubtless be brought about during the year 1907.

◆

Shall the Baku Fields be Protected.—The Russian Ministry of Commerce proposes to abolish the technical committee for protecting the oil fields, which exists at Baku, and has asked the Viceroy of the Caucasus for his opinion on the subject.

A New Kerosene Carburettor.—An application for a patent has recently been filed at the Patent office by Messrs. Brown and Barlow, Ltd., Mr. Clement Brown, and Dr. Paul Dvorkovitz relative to an improved method of vapourising oil for making a combustible mixture for internal combustion engines.

LONDON OIL SHARE MARKET.

FRIDAY, JANUARY 4TH.

The last fortnight having embraced the holiday season, working days on the London Stock Exchange have been curtailed by 'Xmas Day, Boxing Day and New Year's Day, and as dealing has been a good deal restricted in all but the most active securities there is not much to report in connection with movements in the Oil Group.

To quote in full prices recorded on Saturday, 22nd, Anglo-Russians were 0-⅛, Assam Oil ⅝-¾, Baku Ordinary 2s. 3d. to 2s. 9d., Preference 4s. to 5s., Bibi-Eybats ⅜-½, Debentures 84-89, European Petroleum Preference 1/16-3/16, Debentures 79-84, Californian Oilfields 4½-5, Refineries 1 3/16-1 5/16, Russian Ordinary 10s. 6d. to 11s., Preference 11s to 11s. 6d., Debentures 93-96, Schibaieff Ordinary 7s. to 8s., Preference 2¼-2¾, Shell Transport Ordinary 29s. 6d. to 30s. 6d., Preference 9-9½ and Spies 7/16-½.

Subsequent alterations consist of the deduction of the dividend on the Shell Transport Ordinary on the 28th ult., which left the quotation at 28s. 6d. to 29s. 6d., a decline in the price of Russian Debentures of 2 per cent. at 91-94, and an improvement of ¼ in Shell Transport Preference at 9¼-9¾ on Wednesday last, and an advance yesterday in Californian Oilfields of ½ per cent. at 5-5½.

The closing account for the year 1906 commenced on Monday, 24th, ult., when the rates of interest charged were again very stiff, those for the majority of miscellaneous securities ranging from 8 to 9 per cent. to 9 to 10 per cent. changes from "making-up" prices fixed at the preceding settlement were somewhat irregular for for Russian Ordinary and Preference improves 3d. per share at 11s. and 11s. 6d. respectively. Shell Transport Ordinary at 1½, Schibaieff Ordinary at ⅜ and Preference at 2½ were unchanged, while Anglo-Russian at 1s. lost 3d., Baku Ordinary at 2s., Preference at 4s. and Spies at 9s. were all three 1s. lower and Californian Oilfields declined ½ at 4¾.

Latest market prices are given on page 14.

◆

THE BAKU-BATOUM PIPE LINE.

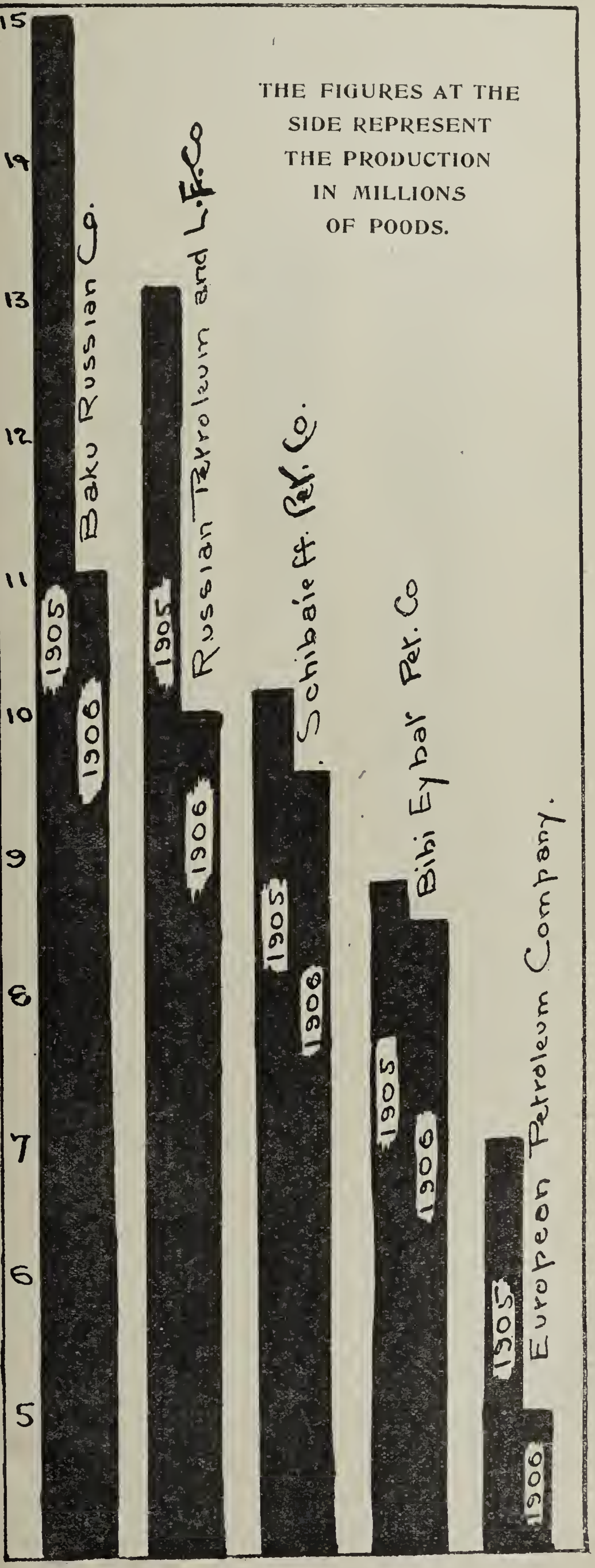
The kerosene exporting firms at Baku and Batoum are now much perturbed over the question of the 2 per cent. usually retained by the railway upon all kerosene pumped from Baku to Batoum to provide for loss by leakage during transit. Formerly the balance was returned to the senders in proportion to the quantities sent. There has been no distribution in the balance of this 2 per cent. allowance for the past 18 months, and in reply to the enquiries of the petroleum firms, the railway authorities have declared that there will be no distribution as the loss has been over 3 per cent.

The question therefore now asked is whether the liability for losses arising from abnormal causes can be put upon the senders, who now stand to lose a considerable quantity of oil.

THE OPERATIONS OF THE ENGLISH COMPANIES IN RUSSIA.

PRODUCTION SHEWN AT A GLANCE.

The following specially prepared diagram shews the production for the past two years of the various English petroleum companies operating in the Russian oil fields. It will be noticed that in every case, consequent upon the disturbed state of the Caucasus during last year, the production suffered to a considerable extent, though this was more than counterbalanced by the abnormally high prices which have prevailed.



OIL DEVELOPMENTS IN MEXICO.

In a recent article written in reply to the question of "Is there oil in Mexico"? Consul S. E. Magill, in answering in the affirmative, gives some data relative to recent petroleum developments in that part of Central America.

Mr. Magill writes from Tampico and says that five years ago attention was called to the explorations of California oil men in the vicinity of Tampico, and in 1902 the statement was made that oil had been discovered 40 miles west of Tampico. From the history of oil discoveries in the United States it was reasonable to assume that excitement would follow its discovery in Mexico, with consequent rapid development of oil-bearing territory, and a determination of its character and extent. Such has not been the case by any means.

The original discoverers sank numerous wells, but before making known their discovery they secured for themselves nearly all the available land for miles around, thus effectually preventing others from exploring in the immediate vicinity. Leasing lands believed to be oil-bearing is a business new to Mexico, and is entered upon by local land owners with reluctance. Perhaps other reasons such as the length of time usually required to make land transfers in Mexico, operated to prevent any such rapid development as would have followed the discovery of oil in any part of the United States. Chicago and Pittsburg capitalists secured several lots of possible oil land north of Tampico, and leased a large tract near the American border in the State of Coahuila, which last was explored without satisfactory result. Other explorations have followed near the border by other interests, but so far as known without success. Pennsylvannia capitalists secured by lease large tracts to the south of Tampico along Laguna de Tamiahua, and surmounting great difficulties in getting drilling materials to their land, they explored one section of their property to a depth of about 1,200 feet without finding oil. They have moved to another section in the same vicinity and are now drilling there. That oil exists near the Laguna seems undoubted, as it is often seen on the surface thereof, and the frequent asphalt deposit along its shores add further proof.

Explorations have been carried on for some years by English capitalists in the vicinity of Tuxpan, Veracruz, but so far without other results than to induce continued explorations in that section by Americans and another English company, and in two clashes of interest between rival exploring companies the law has been invoked to decide rights whose prospective value is deemed great. Eastern American capitalists are exploring near Papantla, Veracruz. There are unconfirmed reports of their success. In the extreme southern part of the State of Veracruz, Messrs. Pearson and Sons, of London, are said to have discovered a grade of oil superior to that produced near Tampico, and have made extensive preparations to store and refine the same, as well as to push further explorations, but no reliable reports are at hand as to quantity of oil obtained by them or promise thereof.

The owners of the original wells at Ebano, near Tampico, went on developing their property until they shewed a sufficient production to justify the Mexican Central Railway Co. making a contract for about 1,500 barrels per day and to alter a large number of engines from coal to oil burners to consume it. This oil is now being delivered and the railway is erecting large storage tanks to receive it.

Shallow wells giving out a good quality of oil, have been discovered around Mexico City, but the flow has been exceedingly limited, and explorations are not now being made in that vicinity. In the State of Oaxaca and at points on the Isthmus of Tehauntepec oil has been discovered and of a high grade, but the owners of these wells are concealing the quantity, and other interests claim that the wells are shallow and of no permanent value.

Outside the Tampico district a profitable oil field has not yet been developed in Mexico, but it would be unjust to say such may not be at any time the case, for energetic and capable men and companies are exploring in Coahuila, near the border, in Tamaulipas, Veracruz, Oaxaca, and Jalisco, and a strike may be made any day which will open up another paying field and give Mexico what it greatly needs, *i.e.*, a fuel and illuminant which it is not necessary to import.

[The rumour mentioned above as to Messrs. Pearson and Sons, of London, having struck a superior grade of oil, was confirmed in these columns some weeks ago, as the result of a chat which our representative had with Messrs. Pearson and Sons.—Ed. *P.R.*]

CLASSIFIED IMPORTS INTO UNITED KINGDOM UP TO DECEMBER 31st, 1906.

IN GALLONS.

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Country.	Illuminating.		Lubricating.		Residuals.		Gas Oil. (Solar)		Benzine.		Fuel Oil.		Other Descriptions.		Totals.	
	Since Dec. 17.	From Jan. 1.	Since Dec. 17.	From Jan. 1.	Since Dec. 17.	From Jan 1.	Since Dec. 17.	From Jan 1.	Since Dec. 17.	From Jan. 1.	Since Dec. 17.	From Jan. 1.	Since Dec. 17.	From Jan. 1.	Since Dec. 17.	From Jan. 1.
Austria ...	—	2,118,640	8,000	416,930	14 000	126,730	—	—	—	—	—	—	—	—	22,000	2,673,300
Belgium ...	—	67,570	16,910	505,118	—	11,000	—	—	—	5,300	—	—	—	5,617	16,910	583,605
Canada ...	—	—	—	47,460	—	56,400	—	—	—	—	—	—	—	200	—	101,060
Dutch India.	—	480	—	960	—	192	—	—	1,004,420	15,174,650	—	1,693 010	—	1,920	1,004,420	16,871,212
Germany ...	356,520	8,012,180	97,870	1,500,363	—	—	—	—	—	2,380	—	—	—	17,562	454,390	9.533,565
Holland ...	—	10,180	—	7,690	—	9,440	—	—	37,840	1.552,463	—	271,000	2,220	98,100	40,060	1,956,593
Roumania ...	—	6,757,945	—	—	—	683,080	746,600	5 092,570	—	1,892,460	—	125,660	—	—	746,600	11,551,715
Russia ...	2,997,400	32,171,820	8,000	5,036,831	—	—	—	3.731,473	—	7,410	—	—	—	13,760	3.005,400	40,961,294
U.S.A. ...	4,430,460	95,706,435	1,056,490	42,351,271	2,400	673,368	3,453,880	46,837,688	615,100	8,105,220	—	9,476,660	13,160	1,878,694	9 571,490	205,219,246
Other Countries	—	1.655	—	36 782	—	—	—	—	—	4,130	—	3,840	—	217,550	—	263,957
	7,784.380	144,846,905	1,187,270	49,903.405	16,400	1,560,210	4,200,480	55,661,731	1,657,360	26,744,013	—	11,570,170	15,380	2,233,403	14,861,270	292,718,547

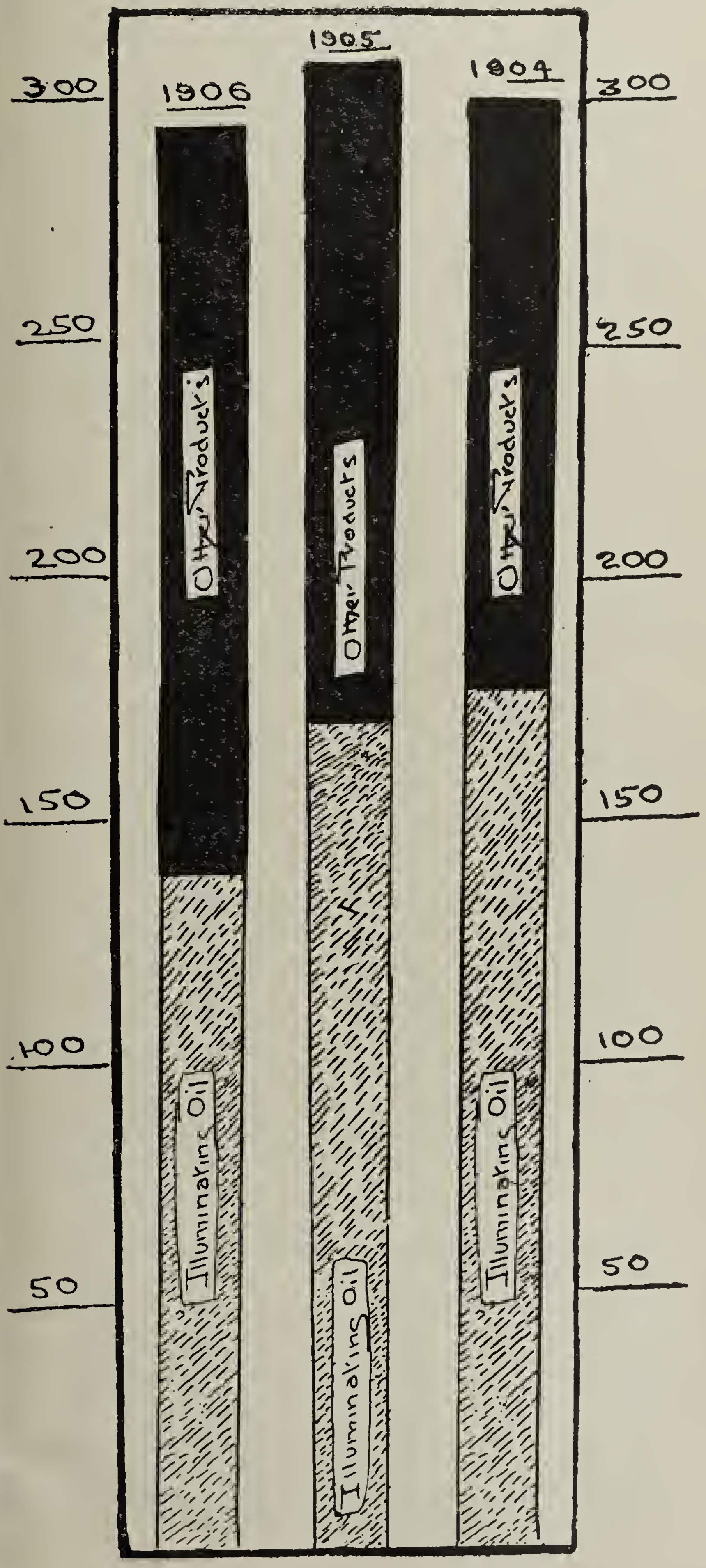
THE ANGLICIA PETROLEUM CO., LTD.

ANNUAL REPORT.

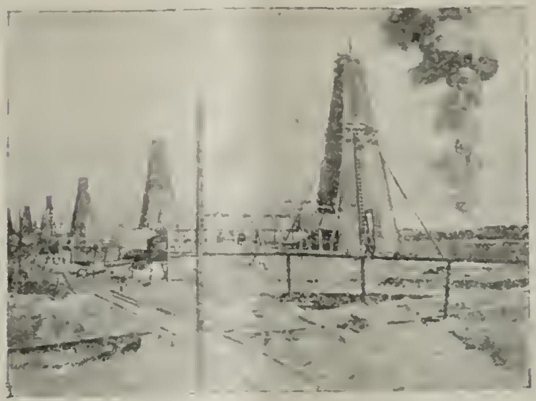
The report of the Anglicia Petroleum Co., Ltd., for the year ended 30th April last, to be presented at the meeting next Monday, states that, in accordance with the desire expressed at the last general meeting, a balance-sheet and profit and loss account for the same period are now also published of the Galizische Naphta Actien-Gesellschaft Galicia. All general expenses have been charged to the trading account of the Galicia Co., and, after making a substantial allowance for depreciation, the Galicia Co. has declared a dividend of 4 per cent. on its total capital, equal to kr240,000, at 24, £10,000. To this must be added the amount brought forward from last year, £4,602; and transfer fees, £3—together £14,605. The directors propose to write off a further one-fifth of the preliminary expenses, £1,980; to pay a dividend of 7 per cent. for the year on the first preference shares, £7,559; and to carry forward, £5,066. The year under report was one of great difficulty, owing to the unsettled condition of the oil trade, and only low prices were obtainable on export sales. Taking this into consideration, the directors do not consider the result of the year's trading unsatisfactory. Considerable amounts were expended for upkeep and maintenance, both at the refinery and at the oil fields; and, in addition to this, the directors felt bound in the best interests of the company to make substantial provision for depreciation. They are convinced that a sound and successful business can only be built up by a conservative course in this respect being adopted. At Schodnica, although many of the wells have been slightly deepened and cleaned, the production has steadily diminished, and now amounts to only some 28 tons a day. The deep test shaft, in the cost of which the Galicia Co. participates to a limited extent jointly with two other firms, has now reached a depth of about 900 metres without any result being obtained up to the present. The company's gross production from the Boryslaw field for the year to April 30 last amounted to about 23,000 tons. The output seriously diminished early in the summer, but with the beginning of September two fresh wells came into production, which up to the present have been yielding satisfactorily. Several other shafts have now reached a depth that justifies the hope that they will also soon begin to produce. The daily yield now amounts to about 100 tons. The "Galicia" Co. is drilling a well on its land in the Tustanowice district, which has already reached a considerable depth. Numerous wells in the vicinity are giving good results. The refinery continues to work satisfactorily. The demand for the various articles manufactured is good, and a steadily increasing trade is also being built up in lubricating oil. With the establishment of the "Galicia" Co. and the taking of offices for that company in Vienna, the arrangement with Messrs. Ofenheim and Co. was terminated by mutual agreement. Mr. Julius Priester, who, as Messrs. Ofenheim and Co.'s chief representative in Vienna, has been associated with the practical management of the undertaking for several years past, has now been appointed manager and a director of the Austrian company. Wilhelm Ritter von Ofenheim has been co-opted on the London Board, subject to confirmation by the meeting, and thus the company is retaining the benefit of his exceptional experience and valuable services.

PETROLEUM IMPORTS INTO THE UNITED KINGDOM DURING 1906.

The following diagram illustrates at a glance the volume of petroleum products imported into the United Kingdom during 1906, as compared with the figures for the two preceding years. It will be noticed that the total imports of petroleum products fall somewhat below what they were either in 1904 or 1905, though, it may be mentioned, they are above those of three years ago. A record has been established in the importation of the products of petroleum, in which lubricating oil and benzine play a prominent part, but the imports of illuminating oil have diminished to a deplorable extent, being the smallest for many years. The figures at each side of the diagram denote the volume of the imports in millions of gallons.



RUSSIAN . . AND ROUMANIAN . . NOTES.



A Good Spouter.—Well No. 19. belonging to the Regatul Roman Co. at Moreni, had commenced to spout last week, yielding 340 tons of crude oil per day.

Astrakhan Storages Rented.—It is reported from Astrakhan that all the ships, wharf and storage installations of the Sokoloff Co , an important local concern, have been rented for one year by Messrs. Lboff and Skrepinsky.

Far Eastern Shipment.—On the 10th of December a cargo of 308,000 poods of kerosene was loaded by Messrs. Mantascheff and Co. on the ocean steamer "Foyle," intended for their own depôts in the Far East. This is the first cargo shipped by them to the Far East for two years.

Better Transport Facilities Needed.—The operations of the Roumanian refineries have lately been seriously hindered by the inadequate transport facilities provided by the Roumanian State railways. Mr. Miclescu, director of the Roumanian State railways, has invited the principal petroleum firms to a conference to agree upon means to remedy this state of affairs.

The Baku Housing Question.—At a private conference of Baku petroleum producers it was resolved to ask all firms for particulars of the amount of land required by them for housing their workmen on the plots granted by the Government. The Bebe-Aibat plot granted by the Government has proved insufficient for the purpose in view, and it will be necessary to acquire some more land from the peasants.

The Roumanian Boom.—The acquisition of petroleum lands by various parties in Roumania continues on a very extensive scale. The Steaua Romana continue to take up fresh concessions. Mr. Pleyte, representing the Royal Dutch Co., is also buying up more land. The Italo-Roumanian Co. are seeking to purchase several producing petroleum properties to combine with their present property, on which they have but a small production.

The Trade in Fuels.—A company has been formed under the title of Grigori Benenson Trading and Industrial Co., for the purpose of trading in Russia in various goods, chiefly fuels, such as petroleum products, coal, wood, also in timber goods; also to construct, acquire and work petroleum refineries and saw mills. The company has purchased from Mr. A. A. Bogdanoff the timber estate "Riedkino" of an area of 11,900 dessatines. The nominal capital is 1,000,000 roubles divided into 1,000 shares of 1,000 roubles each. The founder is Mr. G. O. Benenson, merchant, of Baku.

A New Limited Company.—The business of Messrs. I. E. Pitoeff and Co., petroleum producers, is to be formed into a Russian limited company with a capital of 3,000,000 roubles, divided into 12,000 shares of 250 roubles each. The founders are Messrs. K. E. Pitoeff, A. I. Mantascheff, G. M. Lianozoff, M. I. Dolukhanoff, G. E. Pridonoff, E. S. Terian, G. A. Pitoeff and D. F. Kharasoff. In addition to the petroleum properties at Baku and on Tcheleken island, the company also takes over the house property at Tiflis and fisheries in the Eastern Caucasus belonging to the same firm.

Roumanian Producers to form an Association.—In accordance with the requirements of the new mining law, the Roumanian Mining Department has called upon the Roumanian petroleum producers to form themselves into an association, which will undertake to look after matters concerning the petroleum industry as a whole, and provide a common fund for the purpose. This is to include the establishment of fire brigades, hospitals, outside medical aid to workmen, and maintenance of police to enforce the mining law. A committee consistiug of Government officials and representatives of the petroleum producers has been nominated to work out the basis of such association.

Fire.—A fire which broke out at Bebe-Aibat on the 11th December destroyed six derricks on the Zoubaloff property.

Social Intercourse.—The officials employed by the various petroleum enterprises in Roumania have formed themselves into an association with headquarters in Bucharest. The object is social intercorse and mutual help among the members.

The Coming Petroleum Congress.—The *Moniteur du Petrole Roumain* announces that his Royal Highness Prince Ferdinand, Crown Prince of Roumania, has consented to become patron to the third International Petroleum Congress to be held in Bucarest in September, 1906.

The Apostolache Petroleum Co., owning a petroleum property at Apostolache, Roumania, which was hitherto controlled by Messrs. Eberhard, Marchena and Co , of France, will now pass under the control of another French group of capitalists, at the head of whlch is Mr. Bardou.

The Roumanian Tax.—The amount realised from the tax on petroleum in Roumanian in November, 1906, amounted to 396,973 francs against 363,563 francs realised from the same source in November, 1905. The total amount received during the first 11 months of 1906 was 1,948,341 francs against 1,730,210 francs in the corresponding period of 1905.

Romanian Fuel Contracls at Good Prices.—The Administration of Roumanian Railways has recently coucluded contracts with various refineries for the supply of 90,000 tons of residuals, to be delivered in the course of three years, at the price of 30 francs per ton. Last year the railways paid only 26 francs per ton for their fuel. The news of these contracts has resulted in a considerable improvement in the price of residuals.

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Astrakhan Stocks.—The total stocks of residuals left to winter at Astrakhan amount to 10,055,000 poods, of which the largest quantities are owned by Nobel Bros. 3,500,000 poods, Mazout Co., 3,500,000 poods and the Eastern Transport Co., 1,000,000 poods. The total stock of kerosene is 590,000 poods of which the Schibaieff Co., own 200,000 poods, and Nobel, the Mazout Co., and Merkulieff Bros. hold 100,000 poods each.

Additional Roumanian Railway Facilities.—The Roumanian Government resolved to double the railway line between Ploesti and Campina, at a cost of about 3,500,000 francs. The object of this undertaking being solely to provide for the increased traffic in petroleum products, our contemporary, the "Moniteur du Petrole Roumaine," suggests that the object in view might be better served and at less cost by the laying of two or three additional pipe lines over the same distance.

Proposed Mining Law Modification.—In view of the proposed modification in the Roumanian Mining Law the Roumanian petroleum producers demand that the requirement of a minimum distance of 30 metres between boreholes shall be done away with, that the minimum distance of a borehole from the border of a plot shall be reduced from 15 to 5 metres; also to extend from six months to one year the term within which foreigners in charge of petroleum properties have to learn to speak Roumanian, and to revoke the right conferred on the district mining engineer to suspend any works manager, who may by his fault have caused two accidents within a year.

AMERICAN PETROLEUM EXPORTS.

STATISTICS FOR NOVEMBER.

According to the official publication of the Washington Bureau of Statistics, the exports of petroleum from America from the various ports during November were as under:—

	1905. Quantities. Gallons.		1906. Quantities. Gallons.
CRUDE—			
Baltimore	—		—
Boston and Charlestown	—		—
Delaware	6,499,914		—
New York	—		6,033
Philadelphia	270,000		9,627,299
Galveston	4,620		1,040
Total	6,774,534	Total	9,634,372
Total value for the month, 1905			$372,372
,, ,, ,, 1906			$548,217
NAPHTHAS—			
Baltimore	—		—
Boston and Charlestown	246		2,100
Delaware	—		—
New York	719,720		406,451
Philadelphia	965,011		93,850
Galveston	—		—
Total	1,684,977	Total	502,401
Total value for the month, 1905			$157,328
,, ,, ,, 1905			$70,298
ILLUMINATING—			
Baltimore	3,867,675		—
Boston and Charlestown	100,726		70,799
Delaware	—		48,458,525
New York	29,352,684		—
Philadelphia	20,481,335		22,986,061
Galveston	2,462,061		2,403,261
Total	56,264,481	Total	73,918,646
Total value for the month, 1905			$3,765,359
,, ,, ,, 1906			$4,441,003
LUBRICATING—			
Baltimore	388,677		586,092
Boston and Charlestown	5,519		22,353
Delaware	—		—
New York	6,970,744		8,361,299
Philadelphia	2,589,805		3,552,729
Galveston	110		9,000
Total	9,954,855	Total	12,531,473
Total value for the month, 1905			$1,270,575
,, ,, ,, 1906			$1,498,401
RESIDUUM—			
Baltimore	—		—
Boston and Charlestown	—		—
Delaware	—		—
New York	900,500		530,000
Philadelphia	6,684,830		5,333,023
Galveston	200		—
Total	7,585,530	Total	5,863,023
Total value for the month, 1905			$219,902
,, ,, ,, 1906			$181,420
TOTAL MINERAL OILS—			
Baltimore	4,256,352		586,092
Boston and Charlestown	106,491		95,252
Delaware	6,499,914		—
New York	37,943,648		57,762,308
Philadelphia	30,990,981		41,592,962
Galveston	2,466,991		2,413,301
Total	82,264,377	Total	102,449,915
Total value for the month, 1905			$5,770,801
,, ,, ,, 1906			$6,739,334

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YOKOHAMA PETROLEUM IMPORTS.

The imports of petroleum products into Yokohama during October amounted to 821,640 gallons, being valued at 180,641 yen, as compared with 1,361,012 gallons for the corresponding period of 1905, valued at 289,280 yen. During the 10 months of 1905 Yokohama received imports of petroleum to the extent of 11,641,771 gallons, these being valued at 2,453,863 yen.

AMERICAN NOTES

A New Company.—A new company entitled the Georgia Petroleum Co. has been formed to exploit an oil well that has been discovered near Louisville in Jefferson county. This well is reported to be the richest struck for many years.

Activity at Spindle Top.—The developments which are being carried out at present at Spindle Top shew the exercise of more activity than in any other portion of the Gulf coast region. The gross output in the field is now placed at 3,000 barrels daily.

The Guffey Pipe Line.—The Guffey Pipe Line Co. is progressing very rapidly with the preliminary work in connection with the building of their pipe line to the Mexican gulf. The necessary pipe is now being hauled and distributed, and very shortly the actual work will be under way.

The Illinois Field.—The Illinois field is now producing more oil than the fields of Ohio, West Virginia, Indiana and Kentucky put together. During the week ended December 22nd no less than 28 wells were completed, and these swelled the already large production by over 2,000 barrels daily.

The Kentucky Oil Field.—In the highways among the Cumberland hills, the heart of the Kentucky oil producing district, transport is impossible owing to severe storms, and the result of these has been to greatly impede drilling operations. Everything is now very quiet throughout Kentucky.

A Remarkable Gas Well.—The Eastern Oil Co. has a gas well in the Indian Territory fields that rivals the famous Caney well. It has recently been registering 47,000,000 cubic feet per day, when it became impossible to fix the gauge above the hole. At present there is no market for the production from this well.

Mid-Continent Stocks.—At the close of November the stocks of oil in the Mid-Continent fields amounted to nearly 23,000,000 barrels, being an increase during the year of almost 10,000,000 barrels. The stocks in America's fields west of the Mississippi now exceed those in the Pennsylvauian fields by about 11,000,000 barrels.

The Gulf Pipe Lines.—We understand that construction of the Texas Co.'s trunk pipe line from Tulsa to Houston, Texas, will commence at the new year, and be pushed toward completion as quickly as possible. Dallas is said to be the place which is being favourably considered as a distributing station for North Texas.

In Southern Coalinga.—Considerable interest is now centred in the developments in the Southern portion of Coalinga. A number of fresh deals have recently been closed for land, and a large amount of territory has be re-located. Several wells are being drilled in territories not so far proven, but up to the present the producing portion has been extended many square miles.

A Pioneer's Death.—The decease is announced of Senator Myron Matson, one of the pioneer operators for oil in the Territory fields. Mr. Matson formed the Matson Oil Co. 16 years ago, being its president. He was also a director of the Devonian Oil Co. and president of the Victor Oil Co. The efforts of Mr. Matson were successful in greatly assisting the development of the Indian Territory field.

Heavy Contract for Californian Oil.—As a result of a meeting between the Associated Oil Co., of California and the Independent Producers' Agency of the Kern River field, the Associated purchased from the latter mentioned company 1,000,000 barrels of oil now held in storage at 25 cents per barrel, and the entire prodnct of the Independent for 1907, which is estimated at 2,500,000 barrels. The figure for the 2,500,000 barrets was 27½ cents per barrel.

The Watering of Oil Wells.—A Mr. E. W. Peeple is the plaintiff in a case now occupying one of the American courts, the defendants being the Majestic Oil Co. It seems that the plaintiffs owns land in Cass township, Hancock county, and he alleges that the defendants have wells on the adjoining tract which are known to be "water wells." The salt water from these wells, it is suggested has flowed through plaintiff's fields and damaged the fertility of his soil. He claims damages and an injunction.

BAKU PRODUCTION IN NOVEMBER.

The total production of crude oil at the Baku oil fields during November amounted to 41,490,000 poods. The production of the leading firms was as under :—

	Poods.
Nobel Bros.	5,400,000
Caspian and Black Sea Society	5,400,000
Baku Naphtha Co.	2,900,000
Mantacheff and Co.	2,200,000
Moscow-Caucasian Co.	1,900,000
Caspian Society	1,700,000
Mirzoeff Bros.	1,400,000
Aramazd Co.	1,200,000
Russian Naphtha Co.	1,300,000
Pitoeff and Co.	1,200,000
Russian Petroleum and Liq. Fuel Co., Ltd.	1,200,000
Naftalan Co.	1,100,000
Assadulaeff	1,100,000
Baku Russian Petroleum Co., Ltd. ..	1,000,000
Schibaieff and Co.	1,000,000
Bibi-Eybat Petroleum Co., Ltd.	1,000,000
Nagieff	700,000
Shikhovo Co	700,000
Neft Co.	600,000
European Petroleum Co., Ltd.	600,000
Ter Akopoff Co.	500,000

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THE RUSSIAN PETROLEUM AND LIQUID FUEL CO., LTD.

The following circular has recently been issued by the secretary of the Russian Petroleum and Liquid Fuel Co., Ltd. :—

"I am directed to advise you that the production of crude oil for the first six months of the year amounted to 6,741,784 poods, as against 10,951,950 poods for the first six months of 1905. This reduction was the result of the deterioration of the wells consequent on the strikes and conflagration of last year. The weekly output had, however, been gradually raised to the level of 300,000 poods, when fresh strikes and disorders broke out at the beginning of July, interrupting work for a period of over eight weeks. Regular pumping was not resumed until September, and, starting at 140,000 poods for the week, has now again reached 300,000 poods. The total output to date is about 10,400,000 poods, less than half of what may be expected in a normal year.

"Pending the receipt of accounts from our partners in the distribution business in Russia, no estimate of results can be arrived at, and the directors are not, therefore, in a position to pay any interim dividend on the preference shares. The directors are informed that the balance of the Government loan promised to the company (about £30,000) is shortly expected to be paid in Baku, and will, in accordance with the Government conditions, be applied towards the reinstatement of the properties.

"Mr. H. N. Gladstone has since the general meeting resigned his seat on the board, and Mr. A. John Hugh Smith has been appointed to fill the vacancy. Mr. Leslie Urquhart, who, being unable under present circumstances to return to Baku, has resigned his position of general manager, agreed to continue his connection with the company as local advisory director in St. Petersburg."

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THE SPOUTER AT TZINTA.

In our last issue we published the news of the striking of a powerful spouter at Tzinta in Roumania. This is the first substantial proof of the existence of petroleum in large quantities in that locality.

In this connection it may explained that Tzinta forms the north-eastern prolongation of the Baicoi zone, and is situated in an admirable position for exploitation. It is quite near to the town of Ploesti and Gageni railway station, and there is a good road from it to the principal stations in the district. Since the striking of the spouter belonging to the Bergheim, MacGarvey and Drader Syndicate, work on the many wells laid down in the locality is being carried on with much greater energy. Land has gone up in price, and many deals have taken place.

Producers operating in Tzinta will have the great advantage of being in the close neighbourhood of two big refineries—that of the Vega Co. (Disconto group) and of the Romano-American Co.

The well in which the spouter was obtained, and which is 320 metres deep, has unfortunately had its derrick and machinery destroyed by fire, which broke out during the eruption. At the time of writing the well continued to spout intermittently, the yield of oil varying between 60 and 100 tons per day.

A hand-dug well in the vicinity of the spouting well has struck a rich oil stratum at a depth of 150 metres.

Telegraphic Address:—"OLEINE."

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OIL ENGINES FOR MARINE PURPOSES.

In our last issue, upon page 339, we published a brief report of a lecture delivered by Mr. F. M. Timpson before the members of the Institute of Marine Engineers upon "Oil engines for marine purposes." We have now been favoured with a lengthy report of the address, which in view of the importance of the subject, we have pleasure in giving.

Mr. F. M. Timpson, in the course of his address said that well-designed oil engines had fewer working parts than those worked by steam, and if treated with care required but little attention. For some years past motors obtaining power from low-flash oils such as naphtha and petrol had been fitted as a general rule for the propulsion of pleasure boats, fishing craft, etc., in the United States and some Continental countries, and more recently in Great Britain. The service given by these motors had been as a rule satisfactory, but the dangers of explosion and fire from using those highly explosive spirits, coupled with the cost, had rather retarded much progress for use in every day commercial work. A firm with which he was associated had this year put in hand a large drifter with a three-cylinder oil engine of 250-b h.p., which was, he believed, the largest oil engine yet made in this country. The engine in question was designed to have simplicity in working, and although not yet fully completed in respect to sea trials, had proved a thorough success as an oil engine. The engine had one valve on each cylinder head for admission of the charge and air valves with connection to the crank chamber and cylinder—in the first instance, for the supply of air pressure, which was obtained by the piston trunk working into an air-tight crank chamber, and, in the second instance, to mix with the oil feed and supply fresh air to scavenge the cylinder, thus cleaning out foul gases before compressing the fresh charge. The oil was fed to the cylinder by gravity and controlled by a governor arrangement cutting off supply in the event of excessive speed.

Combustion took place every down stroke, and was of such a nature that the exhaust temperature on test was as low as 120 degs. F., while there was no objectionable noise from the exhaust as was common with petrol engines with high power. To faciliate starting the engine, a small engine driving an air compressor was provided, and compressed air was used as an impulse in moving the main engines which were warmed up round the cylinder heads by the exhaust of the small engine being carried round them. Regulation of speed and reversing was accomplished by the use of a feathering propeller which enabled the pitch to be varied or the blades placed neutral. The "astern" movement was prompt, the vessel being brought to a dead stop in her own length. It was considered by the makers that although objections were raised on account of feathering propellers it was mainly from the limited amount of experience in their use, as when of a strong and simple design they admitted of quick and easy handling of the vessel, one man working the steering gear and the driving engines. But in view of the actual necessity for a reversing engine where vessels were working in narrow and shallow waters, it was possible to make the engine reverse, and a lighter job of that type was now in hand. A set of 60-b h.p. engines had been installed in a sailing barge carrying 60 tons; that vessel successfully completed her trials recently. Other engines of higher power than any mentioned were contemplated, and with the proportions devised as a complication of cylinders was unnecessary and the weight of machinery was cut down to reasonable limits.

There was also the question of the adoption of oil engines in place of steam for auxiliary engines on board ship. That offered advantages in first cost and actual running, while the engines could be put in full-power service in about three to five minutes from dead cold. In construction there would be a great saving in pipe lines, condensing plant, etc., which with the present price of copper would be considerable. Oil engines, being quite independent, would, of course, run so long as there was oil in the feed tanks. Generally speaking, there was a wide opening for auxiliary engines, not taking into account what might be done in the way of propelling machinery later on.

In regard to the cost of running oil engines of the type mentioned, the consumption of oil was guaranteed not to exceed half-a-pint per horse-power per hour, and, as a matter of fact, that had been considerably reduced in practice. The oil engine did not lend itself to waste, as too much fuel would drown or stop it, and cost ceased from the moment of stopping till actually required for service again, while it was at disposal within five minutes as long as there was oil to hand. Stopping and starting at short intervals might hardly be so quick as with steam, but that could be much accelerated with a compressed-air arrangement and there was no danger in the quick start-off which must occur with oil engines. An important point in the paraffin oil engine was that it should be set to consume the class of oil that was obtainable in the locality where it was to work, as it would be readily understood different oils varied in flash point, and using the wrong oil would occasion considerable trouble. This was much aggravated in the case of engines sent abroad and considerable difficulty had arisen from that cause. Another trouble that had come to his notice had been lack of allowance for difference in temperature of circulating water in tropical climates. When the engine was running the exhaust vapour should be clear; if of a smoky nature it shewed that too much oil was being supplied. That could be remedied by putting a smaller nipple in the supply pipe. If when starting there was difficulty in getting away, it would generally be found to be due to an overdose of oil, which must be cleared away before a correct start can be made. The matter of variation of speed in oil engines would still bear improvement, but he thought that would soon be perfected and allow the same ease in speed variation as with steam.

Another very important point was the maximum speed at which an oil engine could be driven with economy; high speeds might give greater power with a smaller engine, but there was a time limit for combustion, and any cutting of that meant a passing of fuel through the exhaust. One was often asked how frequently oil engine cylinders require cleaning. That depended greatly on the attendance; and while in some cases engines might run for months, others required looking to more often. It would not be a laborious job to have an inspection once a month, and certainly a very much easier process than boiler cleaning.

A feature in oil engines for marine propulsion was that engines, whether of one, two or three cylinders, were independent units, and could be cut out to reduce speed and consumption of fuel, while the arrangement of engines should be that the breakdown of any one would not affect the working of the others. He had found that considerable anxiety was occasioned by the present monopoly of the world's oil supply. Likely users asked: What guarantee have we that with increased demand there will be no rise in the price of oil? Their late president had mentioned that his company had to destroy large quantities of crude oil for which they had no market. He (Mr. Timpson) was sure the fact of any surplus supply was not common property, and it was more commonly considered that any increased demand would be met with higher prices. Some definite announcement by the oil companies as to their line of action in case of increased consumption—which would be very largely augmented by general adoption of oil engines—would assist in getting them into use. He had good reason to believe that the way was clear for higher-powered oil engines. The firm to which he had referred in his paper would take on engines to 300 horse-power.

Mr. W. Lawrie, who opened the discussion, said that it almost seemed as if in future it was going to be a case of "no engineer need apply." There could be no question in his mind that the oil engine was one that would come into general use on a river like the Thames. There they now had a great number of small craft going up and down the river entirely on the influence of the tide. With a very simple engine, such as that described by Mr. Timpson, the machinery could be got to work at very short notice, and no very expert knowledge was required of the man in charge. The feature of the propellor seemed to him to be a little bit of a drawback, but he did not doubt, from what Mr. Timpson had said, that it would be suitable for ordinary purposes.

THE PETROLEUM TRADE OF CZARITZIN.

Navigation on the Volga having closed, and further deliveries from Baku having ceased, the following figures of the stocks of various petroleum products at Czaritzin, taken on the 11/24th November, may be considered as the final figures at the close of navigation.

The total stocks of kerosene on that date amounted to 5,445,062 poods, which is distributed among the various firms in the following manner:—Nobel Bros., 1,061,000 poods; Mazout Co., 949,382 poods; Neft Co., 310,661 poods; Caspian Society, 285,532 poods; N. N. Sokoloff, 132,402 poods; Volga-Caspian Co., 384,080 poods; Merkulieff Bros., 1,286,112 poods; G. S. Dembot, 139,000 poods; Assadulaeff, 520,000 poods; A. Merkulieff, 376,893 poods. As the largest part of the period between now and the spring is generally marked with almost complete inactivity in the kerosene trade, the stocks of kerosene at the re-opening of navigation will be fairly considerable, although at the close of navigation they were below the average of former years.

The stocks of residuals held by the various firms on November 24th were:—Nobel Bros., 2,590,000 poods; Mazout Co., 1,236,254 poods; Neft Co., 9,850 poods; Volga Caspian Co., 195,000 poods; Aisenstein, 365,000 poods· Assadulaeff, 528,865 poods; Lapshin, 173,000 poods: total, 5,097,979 poods.

The stocks of lubricating and special oils on the same date were as under:—Nobel Bros., 826,000 poods; Mazout Co., 171,279 poods; Neft Co., 167,723 poods: total, 1,165,002 poods. For residuals sellers demand 39 copecs, but will probably accept 38 copecs per pood. Prices for other products are:—Machine oil, 1·60 roubles; cylinder oil No. 1, 3·60 roubles, No. 2, 2·85 roubles; spindle oil, 1·55 roubles; solar oil, 1·20 roubles; waggon oil, 1·07 roubles; pyro-naphtha, 1·05 - 1·60 roubles; nigrole, 2·35 roubles; crude oil, 43 copecs per pood.

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The Petroleums of North America.

Being a Comprehensive Account of the Constituents of American Petroleum. . . . .

By Mr. CLIFFORD RICHARDSON.

(*Continued from page 352.*)

The petroleums from other fields in Ventura county are varied in character, but possess no such extreme characteristics as those which have been described, resembling much more the oils from other parts of the State. Typical of these oils is the following from the Sespe district:—

FOUR FORKS OIL.

Before Treatment.

Fractions.	Per cent. Distillate.	Colour.	Sp. gr. 20°	Refrac. Index.
Original oil	—	Reddish-brown	*·8651	—
48–115°	Equal vol.	Colourless	·7483	·1418
115–148	Equal vol.	Colourless	·7066	1·412
26 mm. Pressure.				
56–96°	Equal vol.	Colourless	·7855	1·437
96–138	Equal vol.	Light greenish	·8200	1·454
138–173	Equal vol.	Light green	·8470	1·469
173–219	Equal vol.	Light green	·8370	1·484
219–265	Equal vol.	Bright Yellow	·9026	1·502
265–284	Equal vol.	Reddish-brown	·9214	1·513
Residue	21·2	Penetration 340	—	—

* 32·5° B.

After treatment.

Fractions.	Colour.	Loss with NaOH	Loss with H_2SO_4.	Sp. Gr.	Refrac. Index
48–115°	Colourless	1·4%	·9%	·7512	1·424
115–148	Colourless	1·5	1·1	·7102	1·412
26 mm. Pressure.					
56–96°	Colourless	·9	1·4	·7855	1·437
96–138	Colourless	2 0	1·4	·8195	1·456
138–173	Light green yel.	3·1	4·6	·8435	1·469
173–219	Light green yel.	4·6	6·8	Lost	—
219–265	Dark brown	4·6	9.3	·9151	1·499
265–284	Dark brown	2·2	18·1	·9221	1·502

This is a light oil containing considerable distillate below 150 degrees at ordinary atmospheric pressure. Above this point the distillation was carried on in a vacuum at 26 mm. and a residue of only 21 per cent., having a consistency of thick flux, was left. None of the fractions shewed any signs of solid hydrocarbons on freezing, and they were not strongly acted upon by sodium hydrate or sulphuric acid. The second distillate under atmospheric pressure is remarkable for its specific gravity, this being very much lower than the lighter distillate which came off before it.

Like the Bardsdale and Torrey-Canyon oil the specific gravity of the heaviest distillate is much less desirable at the same temperature than that from Summerland, Los Angeles and other heavier oils, that is to say, it is not so asphaltic in its nature. These facts do not seem to have been brought out hitherto.

Central Valley of California.

The most important oil fields of California are situated in the Central Valley to the east of the Coast Range, in the counties of Kern and Fresno, which produced in 1904 respectively 19,608,045 and 5,114,958, or 24,723,003 barrels out of a total production in the State of 29,649,434 barrels.

Kern County.

As a producer to any considerable extent Kern county first appears in 1900 with something less than 1,000,000 barrels of oil, derived chiefly from the field on the Kern River, in the neighbourhood of Bakersfield, although small amounts were produced in the Sunset and McKittrick fields.

The Kern River oil has a density of from ·9859 to ·9396, 12·0 to 19·0 degrees B. It contains from ·75 to 1·0 per cent of sulphur and yields, according to Cooper, the following percentages of distillates:—

	19° B. Distillates,	19° B. Sp. Gr.	19° B. Distillates.	19° B. Sp. Gr.
Up to 100	0·0	—	—	—
100–150	4·0	·779	—	—
150–200	8·4	.816	0·0	—
200–250	12·1	·864	2 4	·876
250–300	14·6	·898	25·0	·899

Cracking begins in this distillation.

This oil has not been examined as yet in greater detail.

An oil from a shallow well in the Sunset district, which lies on the western side of the valley, collected by the writer in 1898, had a density of ·9784, 13·1 degrees B. It was distilled *in vacuo* 26 mm., with the following results:—

HEAVY OIL SUNSET DISTRICT—1897.

Distilled at pressure of 25 mm. after drying.

Fraction	+Distillate	Sp. Gr.	Refrac. Index.
60–100°	·9	—	—
100–145	8·0	·8670	—
145–190	8·0	—	—
190–220	8·0	·9209	—
220–224	8·0	·9347	1·523
245–270	8·0	·9621	1·526
Residue	59·1	*	—

* Penetration 95.

Treated with a 10% solution NaOH and H_2SO_4.

Fraction	Loss with NaOH.	Loss with H_2SO_4.	Conc. H_2SO_4.	Sp. Gr.	Refrac. Index.
60–100	8·5%	—	—	—	—
100–150	4·7	1·5%	3·5%	·8656	—
145–290	5·1	·5	6·0	·8888	—
190–220	5·8	1·8	14.6	—	—
220–244	—	—	26·4	·9408	1·524

The higher distillates were so viscuous that they flowed but slowly at ordinary temperatures and the most so of any distillates observed by the writer from California petroleum. No solid hydrocarbons separated from these distillates in a freezing mixture.

The second and third distillates were redistilled in a vacuum of 26 mm. after treatment with alkali and acid, and the distillates collected in fractions of 5 degrees. They were all water white.

Fraction.	Amount Distilled.	Specific Gravity 20°.	Refrac. Index.
100°	20	·8281	1·453
125–130	40	·8607	1·471
140–145	100	·8778	1·482
155–160	75	·8943	1·493
175–180	75	·9083	1·502
200–205	75	·9276	1·515
220–225	75	·9356	1·520
240–245	60	·9457	1·525
260–265	30	·9532	1.529
275–280	20	·9560	1·529
290–295	15	·9579	1·533

The above results can be compared with some interest with the distillates from Summerland oil, and it would appear that the hydrocarbons in the two oils are practically identical, but do not agree in all respects with those isolated by Mabery.

Fresno County.

The petroleums of Fresno county are very varied in character and have a density of from ·9859 to ·8000, 12·0 to 45·0 degrees B., but averaging ·8589, 33·0 degrees B. Cooper has found from ·06 to ·94 per cent of sulphur, together with carbon 86·24 and hydrogen 13·01 per cent. On distillation under atmospheric pressure he obtained the following fractions, all of which were colourless below 250 degrees.

	Distillates	Sp. Gr.
150°	33·06%	·7829
150–200	24·79	·8268
200–250	20·66	·8725
250–300	12·40	·9090
Residue	9·09	·9356

These light petroleums have not been very carefully studied, but it is evident that they differ essentially, as shewn by the specific gravity of the distillates from the heavier California oils, and probably contain very considerable percentages of the naphthenes. No separation of paraffin scale or solid hydrocarbons from the distillates has been noted, but the lightest Fresno oils contain a certain percentage of asphalt, amounting to at least 5 to 10 per cent.

From the preceding data it appears that the petroleums of California are of the most varied character, and that all of them consist of more or less dense asphaltic hydrocarbons. Nitrogenous basis are often present in very large amounts and again in only small amounts. Phenols are a common constituent of the denser oils. Except in those constituents which boil at a comparatively low temperature the components of California oils are unique in their density and viscosity.

None of the components is that of the paraffin series and the hydrocarbons being largely of the C_nH_{2n} and C_nH_{2n-2} series, among those of sufficient volatility to be used as illuminating oils the distillates below 150 degrees do not make good burning oil. They burn with a smoky flame and must be mixed with a large proportion of Eastern kerosene before they can be used.

Texas Field.

The petroleums of Texas are somewhat varied in character and widely distributed over the State. They occur in strata of cretaceous age in Corsicana, Bexar and Medina counties, both heavy and light oils being found. In Corsicana, the first oil field of any scale opened in the State; and in Bexar, rather heavy oils occur, while in the Medina county oil carrying as much as 32 per cent. of illuminants has been produced. The largest additional supplies of petroleum are found in strata of tertiary age in the neocene in Jefferson county, on the Gulf coastal plain, where the Beaumont developments were made in 1891, although the exact age of the latter has not been definitely determined, and in the Sour Lake district in Hardin county. The production of petroleum in Texas was not one of industrial importance before 1898, when over 500,000 barrels were obtained from the Corsicana field. In 1901 the well-known Beaumont or Spindle Top pool was discovered, and over 3,500,000 barrels of petroleum of quite a different character from that of the Corsicana field was the record for that field for that year, becoming 17,500,000 barrels in 1902, after which there has been a very rapid drop until the production of 1904 only equalled that of 1901. The Sour Lake field, in connection with the Saratoga field, produced in 1903 nearly 9,000,000 barrels, and the Batson Prairie field nearly 11,000,000 barrels in 1904, although less than 5,000,000 barrels in 1903. In 1904 a pool was opened in a locality furthest to the south-west of the State, 80 miles from Houston, in Matagorda county, which produced 151,936 barrels of dark-green petroleum of ·9393 to ·9333, 19·0 degrees to 20·0 degrees B. In Harris county a new pool, known as the Humble field, was also opened in that year, which possesses some interest. Other pools producing oil of from ·8140 to ·9032, 40·2 degrees to 25 degrees B., are in existence and may be identified as follows:—

Bexar County District.

Only a small quantity of heavy petroleum was produced in 1902. It came from wells 600 to 800 feet in depth, near San Antonio, and supplied a small local demand. This is not of industrial importance.

Nacogdoches County.

Numerous shallow wells were drilled prior to 1895 near Oil Springs, in Nacogdoches county, some 12 miles south-west of the town of Nacogdoches. There has been a considerable outlay in drilling wells, establishing receiving tanks, and building a pipe line, all of which has been practically abandoned. Only a very limited quantity, supplying a local demand, is now marketed.

Brazoria County.

At Kaiser Hill, near Columbia, Brazoria county, petroleum of good lubricating qualities has been developed, which, owing to a lack of transportation facilities, was not operated during 1904.

South Basque District.

At South Basque, McLennan county, 70 miles south-west of Corsicana, oil is produced of ·8140 to ·9032, 42 to 25 degrees B.

Henrietta District.

At Henrietta, Clay county, 150 miles north-west of Corsicana, 65,455 barrels were produced in 1904, having a gravity of ·8589, 33 degrees B. This oil is said to have a paraffin base, and to yield the following percentages of distillates in the laboratory:—

	Per cent.
Naphtha	9·1
Water-white oil	55·0
Solar oil	13·6
Heavy distillate, asphalt, water and loss ..	22·6

The total production of the State in 1904 was 22,242,413 barrels, making it rank after California, and second in its production in the United States, although third as a field. In the value of its output it was sixth.

The petroleums from the Beaumont, Corsicana and Sour Lake fields have been examined in some detail by several investigators.

Corsicana Field.

The petroleum of the Corsicana field is of two kinds, heavy and light oil, the lighter having a gravity of ·8459 to ·8235, 35·5 to 40 degrees B., while the heavier is much denser.

The writer, in 1900, examined the lighter oil from the field obtained at a depth of about 1,050 feet, with the following results:—

CORSICANA OIL.

Specific gravity 20/20°	·8457
Beaume	35·5°
Flash	Ordinary temp.
Volatile 100°	10·8% (naphtha)
Volatile 160°, 7 hours	35·7
Volatile 200°, 5 hours	11·2
Total	57·7

Residue after heating at 160° flows readily at 21°. Has the appearance of containing paraffin. After heating at 200°, residue has a quick flow at 25°.

Original oil distilled at 25mm. Pressure.

Fraction Crude oil. Atmos. 25mm.	Per cent. Distilled.	Colour Dark-reddish brown, green fluorescence.	Sp. Gr. 20/20°	Refrac. Index at 20°
			—	—
57–100°	4·0	Colourless	·7396	1·415
53–90	6·2	Colourless	·7611	1.423
90–111	7·4	Colourless	.7829	1·436
118–151	10·4	Colourless	·8018	1·447
150–175	10 8	Colourless	·8187	1·458
170–185*	5·0	Colourless	·8368	1·464
Residue	50·8	Reddish-brown	—	—
Loss	5·4	Paraffin		

* Cracking begins.

Fraction. Atmos. 25mm.	Colour.	Loss with NaOH.	Loss with H_2SO_4.	Sp. Gr.	Refrac. Index. at 20°
67–100°	Colourless	3·5%	2·9%	·7337	1·417
58–90	Colourless	2·6	2·3	·7597	1·430
90–118	Colourless	3·1	2·2	·7796	1·438
118–151	Colourless	1·2	1·4	·7939	1·445
151–175	Colourless	3·1	3·0	·8132	1·458
175–180	Colourless	4·2	7·2	·8353	1·464
Residue	Light reddish brown-green fluorescence.	—	15·8	·8960	1·494

It appears that this oil is slightly denser than that from the Ohio field, contains parafin scale, and that the lighter distillates are of a character suitable for illuminants, corresponding with similar components of Ohio oil. The petroleum is, in fact, refined in large amounts most satisfactory.

According to Thiele the distillates obtained from it are:—

	Distillates.	Sp. Gr.
Naphtha	10·8% ..	·710
Kerosene	54·5 ..	·796
Residue	34·7 ..	·905

The residue of the Corsicana oil contains paraffin scale but is to a large extent asphaltic. None of the distillates, however, separate any paraffin in a freezing mixture.

(To be continued.)

The American Oil Market.

New York, Week ended Dec. 22nd.

Conditions governing the older oil fields have not improved to any extent and from the lower south-west fields dusters continue to dominate on a large scale in the recent completions, and in territories where new pools were expected in the developments disappointments were realised. Only light wells continue to be reported in the older fields. Operators in south-eastern Ohio have met with disappointments for new territory. Prospecting is carried on, but indications do not point to any important discoveries of large fields, and little experimental work is under way throughout the old fields, which have been less for some time past. It is the belief that there are congested pools unearthed in the eastern producing area, but these, it is claimed, will be adequate to increase the production to offset the shrinkage in the old fields. In the Illinois fields, dusters continue plentiful and the number of dry holes are steadily increasing. No activity in drilling in the Illinois fields during the present winter is looked for, but during the spring and summer periods renewed activity is expected. In the mid-continent oil fields the reported runs since the opening of the month have been fairly good and for the first week in this month amounted to 66,000 barrels. There was a decrease in the shipments and an increase in the available stocks of about 15,500 barrels a day. The shipments in November were the heaviest on record, averaging 56,000 barrels a day. Indications are for an increased production in the near future. There are few more drilling wells and rigs as compared with the first week last month, says the *Oil, Paint and Drug Reporter*, and the field work for this month bids well to be the lightest of any month this year. Winter weather during the balance of this month will curtail the field work fifty per cent. Advices from the Texas oil fields note more activity in development work and some good flowing oil wells have been brought in and in many sections new wells are being sunk in the field. Recent reports noted that the Tulsa field is now producing some 40,000 barrels of oil per day and when the new pipe lines are built the field will be developed and probably shew an output of 100,000 barrels daily, which it is claimed is more than the present refineries there can handle. Quotations for Texas oil are:—Batson 52½ to 60c., as to gravity; Humble, 65 to 70c.; Jennings, 60c.; Saratoga, 63c.; Spindle Top, 70 to 72c.; Sour Lake, 55 to 68c.; Dayton, 57 to 65c., as to gravity.

REFINED AND PRODUCTS.—There continued a moderately active demand for refined for export and the local market presented no features of special interest. The total engagements during the week in the local market amounted to over 165,000 barrels.

The price for barrelled oil for export remains stationary, and the market is quoted at 7·50c. for New York loading, and 7·45c. for Philadelphia loading. The principal foreign markets remained steady. Freight rates are steady at 2s. 2d. @ 3s. 0d. hence to London, and 2s. 3d. @ 3s. 0d. to Continental ports, as to port and vessel.

Cases for export have been in active demand, and sales amounted to over 372,000 cases. The price of plain tops remained steady at 10c. Freight rates are firm.

Crude for export remained dull, and no sales have been reported worthy of mention. Pennsylvania crude closed at 7·50c. in barrels. Cases for export have been quiet, and no sales have been reported.

Naphthas remain unchanged. For export, no sales have been reported.

CLOSING QUOTATIONS.

CRUDE.		Week ended Dec. 15. 1906.	Week ended Dec. 22. 1906.
National Tran. Certificates	per bbl.	$1·58@1·59	$1·58@1·59
Pennsylvania crude in bbls.	per gal.	7·60	7·60
Pennsylvania crude in bulk		4·50	4·50
Residuum, bbls. for export		6@6½	6@6½

CRUDE AT THE WELLS.

The quotations for oil represented by credit balances were;—

	Week ended Dec. 22. 1905.	Week ended Dec. 22. 1906.
Tiona	1·68	1·68
Pennsylvania	1·58	1·58
North Lima	0·94	0·90
South Lima	0·89	0·85
Indiana	0·89	0·85
CANADIAN OIL:		
Petrolia	1·34	1·30

REFINED—FOR EXPORT.

		Week ended Dec. 15, 1906.	Week ended Dec. 22. 1906.
Cargo Lots for export	in barrels	7·50	7·50
	in bulk	4·40	4·40
Philadelphia loading	in barrels	7·45	7·45

REFINED IN CASES—110 FIRE TEST.

	Week ended Dec. 15.	Week ended Dec. 22.
3,000 to 10,000	10·05	10·15
1,000 to 3,000	10·20	10·20

REFINED—JOBBING LOTS.

In barrels, pkgs. included.

		Week ended Nov. 15.	Week ended Dec. 22.
120 fire test, S.W.	in barrels	12	12
130 fire test, S.W.		12½	12½
150 fire test, W.W.		13	13
In bulk from tanks		10	10
300 fire test		12¾@13½	12¾@13½

NAPHTHA AND GASOLENE.

	Week ended Dec. 15.	Week ended Dec. 22.
Naphtha, crude, car. lots, 68 @ 72 deg.	15·00	15·00
Gasolene, 86 deg.	23·00	23·00

PENNSYLVANIAN OIL RUNS from Dec. 14th to Dec. 20th were:—Dec. 14th, 139,243; Dec. 15th and 16th, 192,961; Dec. 17th, 89,773; Dec. 18th, 124,155; Dec. 19th, 138,774; and Dec. 20th, 136,845. For the month of November, 3,043,408.

THE DELIVERIES OF PENNSYLVANIA OIL for the same dates were:—133,776; 265,263; 147,412; 152,652; 167,599; 115,466. For the month of Nov., 4,960,028.

CHARTERS FOR THE WEEK.

The total charters for refined, crude, naphtha, etc., in bulk, barrels and cases, during the week ended December 21st and from Jan. 1st, were as follows:—

	Week.	Year.	1905.
Refined, barrels and bulk	164,300	11,563,000	12,053,800
Refined, cases	370,000	15,104,100	19,444,000
Crude, barrels and bulk	—	1,431,800	2,328,500
Crude, cases	—	325,000	288,000
Naphtha, barrels	—	277,300	531,700
Residuum, barrels	—	684,901	784,300
Lubricating, barrels	—	—	243,100
Total, barrels cde. eq.	382,721	23,232,300	25,480,568

CLEARANCES FOR THE WEEK.

During the week ended Dec. 21st, and since Jan. 1, the clearances of petroleum, in gallons, from the port of New York, were as follows:—

	Week.	Year.	1905.
Refined	11,162,610	453,304,888	487,583,421
Crude	177,000	432,100	1,085,574
Naphtha	11,400	14,774,484	11,943,515
Residuum	—	4,304,100	3,294,515

EXPORT STATISTICS.

The total exports from the port of New York and from the United States have been:—

	Gallons.
From New York, week ended Dec. 21st	4,341,092
Total from New York, from Jan. 1st, 1906	595,056,544
Same period last year	651,796,805
Decrease	56,740,261
From United States, week ended Dec. 21st	34,434,749
Total from United States, since Jan. 1, 1906	1,196,633,064
Same period last year	1,223,257,354
Decrease	26,624,200

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The "Review" Shipping List.

JANUARY 4, 1907.

(*The following abbreviations are used in this table*:—L. Left; P. Passed; Arr. Arrived; Sp. Spoken; Tr. Trading.)

Vessel.	From.	For.	Latest Date and Position.
ALICE ISABELLE	Sables d'Olonne	Philadelphia	Arr. Dec. 20
ALCHYMIST	London	Shoreham	L. Jan. 2
AMERICAN	Seattle	San Francisco	Arr. Dec. 7
APPALACHEE	San Francisco & Tongku	Shanghai	Arr. Dec. 11
APSCHERON	Genoa	Batoum	L. Dec. 28
ARAL	Hamburg	Philadelphia	In Tyne, Dec. 31
ARAS	Manchester	Newport	Arr. Dec. 29
ARGYLL	San Francisco	Astoria	Arr. Dec. 13
ASTRAKHAN	Tyne	Philadelphia	Arr. Dec. 26
AUGUST KORFF	Philadelphia	Manchester	L. Dec. 27
AUREOLE	Rouen	Tyne	P. Dover, Jan. 1
AZOV	—	—	Trading on W.C. of South Amca.
BAKU STANDARD	Rouen	Kustendje	Arr. Dec. 23
BALAKANI	Philadelphia	London	Arr. Dec. 31
BATOUM	Tyne	Philadelphia	Arr. Jan. 1
BAYONNE	Hull	Tyne	Arr. Nov. 24
BEACON LIGHT	Hamburg	Tyne	Arr. Jan. 1
BEME	Rangoon	Bombay and Kurrachee	L. Dec. 11
BLOOMFIELD	Tyne	Philadelphia	Arr. Dec. 27
BORJOM	Alexandria	Batoum	Sp. Constant'ple, Dec. 19
BRILLIANT	Philadelphia	Copenhagen	L Dec. 30
BROADMAYNE	Port Arthur Texas	Antwerp	Arr. Dec. 27
BULLMOUTH	Shanghai	—	L. Dec. 31
BULYSSES	Cardiff	Borneo	L. Colombo, Dec. 27
BURGERMEISTER PETERSEN	Philadelphia	Swinemunde.	P. Del. Break., Dec. 12
CADAGUA	London	Philadelphia	Arr. Dec. 29
CALCUTTA	Shanghai	San Francisco	Arr. Jan. 2
CARDIUM	Thameshaven	—	P. Southend, Dec. 30
CAUCASIAN	London	Philadelphia	Arr. Dec. 30
CHARLOIS	Amsterdam	New York	Off I. of W., Dec. 31
CHESAPEAKE	Messina	New York	Arr. Dec. 28
CHESTER	Antwerp	Philadelphia	Arr. Dec. 28
CIRCASIAN PRINCE	—	—	Trading on W.C. of South Amca.
CLAM	—	Balekpappan	Arr. Dec. 26
COWRIE	Cardiff	Malta	At Lisbon, Dec. 12
CYMBELINE	Penarth	Philadelphia	L. Dec. 31, 51 N, 26 W.
CZAR NICOLAI II.	Batoum	Hamburg	L. Dec. 26
DAGHESTAN	Batoum	Antwerp	P. Constant'ple, Dec. 27
DAKOTAH	Hong Kong	San Francisco	Arr. Dec. 29
DELAWARE	Manchester	Philadelphia	P. Old Head of Kinsale, Jan. 3
DEUTSCHLAND	Rotterdam	New York	Off I. of W., Dec. 25
DIAMANT	Tyne	Philadelphia	Arr. Jan. 2
ELAX	Port Arthur (Texas)	Dover	L. Newport News, Dec. 21
ELISE MARIE	New York	Christiana	L. Dec. 13
ENERGIE	Philadelphia	Malmo	P. Butt of Lewis, Dec. 31
ERIVAN	Batoum	Manchester	P. Constant'ple, Dec. 23
EUPLECTELA	Hamburg	—	L. Dec. 25
EXCELSIOR	Bremerhaven & Tyne	New York	Arr. Dec. 23
EZIO	—	—	Coasting Peru
FRANCE MARIE	Marseilles	Philadelphia	L. Dec. 3
GEESTEMUNDE	Hamburg	Philadelphia	L. Tyne, Dec. 24
GENESSE	Manchester	Sunderland	P. Eastham, Jan. 1
GEORGIAN PRINCE	Tyne	Key West	Arr. Jan. 2
GOLDMOUTH	Singapore	—	L. Dec. 27
GUT HEIL	Tyne	New York	P. Dunnet Head, Dec. 29
HAINAUT	Antwerp	Alexandria	P. Malta, Dec. 18
HARRY WADSWORTH	Swansea	Philadelphia	Arr. Dec. 25
HELIOS	Philadelphia	Flushing	P. Del. Break, Dec. 21
HOTHAM NEWTON	Middlesboro	New York	Arr. Jan. 1
HOUSATONIC	Bengkalis (Sumatra)	England	L. Sabang, Dec. 18
IMPERIAL	—	—	Tr. on Lakes btn. U.S. and Can.
JOANNIS COUTZIS	Sulina	Piræus	L. Constant'ple, Dec. 26
J. B. AUG. KESSLER	Philadelphia	Hong Kong	Arr. Nov. 26
JAMES BRAND	Santander	Algiers	At Gibraltar, Dec. 31—Jan. 1
KURA	Cardiff	Philadelphia	Arr. Jan. 2
LA CAMPINE	New York	Antwerp	P. Beachy Head, Jan. 2.
LA FLANDRE	Ghent	New York	Arr. Jan. 2
LA HESBAYE	Antwerp	Philadelphia	At New York, Dec. 25
LA MADELEINE	Dunkirk	Nantes	Arr. Dec. 21
LA VIGUESA	Vigo	Philadelphia	L. Oct. 11
LACKAWANNA	New York	Calcutta	At Port Said, Jan. 1-2
LE COQ	Philadelphia	Balye	P. Del. Break, Dec. 14
LOUTSCH	Badalona	Barcelona	Arr. Dec. 31
LUCERNA	Tyne	Philadelphia	P. Dunnet Head, Dec. 30
LUCIFER	Venice	Algiers	L. Dec. 26
LUCIGEN	Tyne	Philadelphia	L. Jan. 1
LUCILINE	Tyne	Philadelphia	L Dec. 25
LUMEN	Batoum	Flushing	Arr. Jan. 1
LUX	Bordeaux	—	P. Oitavos, Dec. 24
MAKKAVEI	—	—	Trading in Black Sea
MANHATTAN	St. Louis (Rhone)	Philadelphia	Arr. Dec. 26
MANNHEIM	Stettin & Tyne	New York	Arr. Dec. 26
MARGARETHA	Batoum	Alexandria	L. Constant'ple Dec. 24
MEXICAN PRINCE	Cette	Batoum	L. Constant'ple, Dec. 21
MIRA	Manchester	Philadelphia	P. Eastham, Dec. 24-5
MUREX	—	Yokohama	Arr. Dec. 29
NARRAGANSETT	New York	London	L. Dec. 20
NERITE	—	—	Tr. in China Seas
NEW YORK	Southampton	New York	160 mls. S.W. from Browh'd, Dec. 30
OCEAN	Antwerp	New York	Arr. Dec. 26
OILFIELD	Philadelphia	Blaye	P. Del. Break., Dec. 19
ORANJE PRINCE	Banes	Flushing	P. Dover, Jan. 2
ORIFLAMME	Philadelphia	Blaye	P. Del. Break., Dec. 18
OSCEOLA	Clyde	Genoa	Arr. Dec. 20
OTTAWA	Hull	Philadelphia	P. Lizard, Jan. 2
OURAL	Antwerp	Batoum	Arr. Dec. 29
PALEMBANG	—	—	Tr. Sts. Settlem'ts & China Seas
PAULA	New York	Amsterdam.	L. Dec. 25
PECTAN	Amsterdam	Tyne	Arr. Dec. 3
PENNOIL	Rotterdam & Tyne	Philadelphia	Arr. Dec. 26
PERLAK	Palembang	Yokohama	L. Singapore, Nov. 25
PHOEBUS	Baltimore	Hamburg	P. Dover, Jan. 1
PINNA	Philadelphia	Amsterdam	Arr. Dec. 31
POTOMAC	Avonmouth	New York	P. Fastnet, Dec. 24
PROMETHEUS	Rotterdam	New York	Arr. Dec. 27
PRUDENTIA	Liverpool	Port Arthur	L. Dec. 23
QUEVILLY	Rouen	Philadelphia	L. Nov. 23
RION	Penarth	Constant'ple	P. Gibraltar, Dec. 25
ROCK LIGHT	Kustendje	London	P. Tarifa, Dec. 28
ROSSIJA	Honfleur	Tyne	Arr. Dec. 19
ROTTERDAM	Tyne	New York	P. Scilly, Dec. 29

Vessel.	From.	For.	Latest Date and Position.
RUSSIAN PRINCE	Antwerp	Hamburg ..	L. Dec. 27
SALAHADJI	—	—	Tr. Sts. Settlem'ts and Java Seas
SAXOLEINE	Tyne	Philadelphia	P. Cape Race, Jan. 2
SEMINOLE	Calcutta	San Francisco	Arr. Dec. 31
SILVERLIP	Port Arthur (Texas)	Portland (Dor.)	Arr. Dec. 31 to ischarge
SINGU	—	—	Tr. in East Indies
SNOWFLAKE	Sulina	Rouen	L. Malta, Dec. 31
SOPHIE	Kustendje ..	Venice......	Arr. Dec. 29
SPONDILUS	Balekpappan	Port Said ..	P. Anjer, Nov. 25
STANDARD	Hamburg ..	New York ..	Arr. Dec. 31
STROMBUS	Hamburg ..	Cardiff	L. Jan. 2
SURAM	New York ..	Hull........	L. Dec. 31
SUWANEE	Kustendje ..	London	P. Gibraltar, Dec. 28-29
SVIET	Batoum	Kherson	L. Dec. 11
TELENA	Cardiff	—	At Columbo about Dec. 31
TEREK	Batoum	Hamburg ..	P. Beachy Head, Jan. 2
TIFLIS	Rouen	Batoum	P. Gibraltar, Dec. 30
TIOGA	Manchester	Galveston ..	P. Eastham, Dec. 24
TONAWANDA	Hong Kong..	San Francisco	L. Moji, Dec. 21
TROCAS	Singapore	Soesoe	L. Nov. 8
TURBO	Southampton	Avonmouth..	Arr. Dec. 30
TUSCARORA	San Francisco	Shanghai ..	L Dec. 15
TWINGONE	Rangoon ..	Madras and Cocanada	L. Dec. 27
VEDRA	Avonmouth	Batoum	P. Dardanelles, Dec. 24
VILLE DE DIEPPE	—	—	In Port Havre, Dec. 26
VILLE DE DOUAI	Rouen	Hull........	Arr. Jan. 1
VOLUTE	Soesoe......	Singapore ..	Arr. Dec. 30
WEEHAWKEN	Belfast......	Philadelphia	L. Jan. 1
WILLKOMMEN ..	Hamburg & Tyne	New York ..	P Dunnet Head, Dec. 30
WINNEBAGO......	San Francisco	Shanghai ..	Arr. about Dec. 24

Latest Market Intelligence.

LONDON OIL MARKET.

Supplied by Messrs. Benjamin & Gee, 31, St. Mary Axe, E.C.

January 4th, 1907.

Refined petroleum has advanced ½d. per gallon all round since our last report and is now quoted:—Russian and Roumanian, 6¼d.-6⅜d.; American, 6¾d-6⅞d.; Water White, 7¾d.-7⅞d.

LUBRICATING OILS

are unaltered as follows:—

American pale, £7 to £9 10s.

American dark cylinder, from £7 2s. 6d.

American filtered cylinder, from £11.

No. 1 Russian, £10 7s. 6d.

TURPENTINE.

American Turpentine has been very firm and higher in in price, but is now not quite at the highest, for Spot it is quoted 50s., and for January to April, 50s. 6d.

LIVERPOOL OIL MARKET.

January 4th.

Refined oils are quiet, and sellers quote 6½d. for Russian, Galician or Roumanian; and 6⅝d. to 7⅝d. per gallon for American.

Petroleum Spirit continues at 1s. 0½d. to 1s. 3d. per gallon for American deodorised, according to quality on the spot.

LATEST AMERICAN PRICES.

New York, January 4th.

Refined, in cases, is steady at 10·10; Standard White, 7·60; Credit balances, 1·60c.

Philadelphia, January 4th.

Standard White is still quoted at 7·45.

RUSSIA.

Baku, December 31st.

The Baku oil market is firm. Light crude oil, spot, 24 copecs per pood; residuals, 25¼-25¾ copecs.

BELGIUM.

Antwerp, December 29th.

The petroleum market remains stagnant. Price of Standard White, spot, 19½ francs per 100 kilos.; December, 19¾ francs; first three months 1907, 19¾ francs.

FRANCE.

Paris, December 29th.

Illuminating oil is quoted in bulk, in whole tank waggons, 22 francs per hectolitre; spirit, 28 francs per hectolitre. Special white oil, 30 francs per hectolitre.

GERMANY.

Hamburg, December 27th.

The kerosene market is firm. The price of American Standard White is 6·80 marks per 50 kilos, Russian, 6·55 marks.

ROUMANIA.

December 30th.

	Francs.
Crude oil from different fields, including pipe line charges, per 100 kgs. ...	3·90-4·20
Refined oil, exclusive of taxes	13·00- —
Motor benzine, including taxes	16·00-18·00
Benzine, doubly refined	24·00-25·00
Residuals in tank waggons, at refinery ...	3·20-3·30
Paraffin	120·00-125·00
Lubricating Oils—	
Agricultural...	30-32
Prime	35-37
Extra	40-42
Royal	45-46

In barrels free on rail including octro tax of 12 fcs. per 100 kilos

Prices for Export.

Refined oil in tank waggons, per 100 kgs.	8·50- —
Benzine, sp. gr. 0·710-0·715	15·50-16·50
,, sp. gr. 0·720-0·725	14·50-15·50
,, sp. gr. 0·730-0·740	11·50-12·50
,, sp. gr. 0·745-0·755	7·50- 8·50

INDIA.

Bombay, December 18th.

Petroleum is steady.

Standard Oil Co., of New York.

Current rates are:—

American, "Snowflake," 150 deg.	Rs. 6	0	2
,, Chester, 125 deg.	4	8	2
,, Monkey Brand, 125 deg.	4	2	2
,, Bulk, 125 deg. (in local made tins).. ..	3	10	0
,, ,, 125 deg. (8 Imperial gallons) ..	3	0	0
,, "White Camelia" brand, 125 deg. ..	No stock.		

The Asiatic Petroleum Company, Limited

Current rates are:—

Burmah oil, in tins, per pair	3	2	0
Borneo oils, in tins, per pair	3	2	0
Sumatra "Rising Sun," bulk, per unit	3	0	0
,, ,, tins, per pair	3	10	0
Silverlight cases, per case	4	8	0
Russian, "Anchor," cases	4	14	0

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IMPORTS of PETROLEUM into UNITED KINGDOM

Specially prepared for this Journal by the Custom House.

FOR THE WEEK ENDED DECEMBER 24TH, 1906—

DATE.	PORT AND IMPORTERS.	DESCRIPTION.	NO. OF GALS.	PORT WHENCE.
Dec.	LONDON—			
18	London and India Dock Co.	Lub.	2,000	Hamburg
18	Anglo-American Oil Co. ..	,,	42,000	Philadel.
18	G. W. Sheldon and Co. ..	,,	850	New York
20	Burt, Boulton, & Heywood.	C.Naph.	2,340	Terneuzen
20	Consolidated Petroleum Co. (Lucigen)	Lamp	1,593,400	Batoum
21	Produce Brokers' Co. ..	Lub.	4,800	New York
21	Fielder, Hickman and Co...	,,	4,800	,,
21	Humphrey and Co... ..	,,	6,040	,,
21	Anglo-American Oil Co. ..	,,	103,000	,,
22	Fielder, Hickman and Co...	,,	4,800	,,
22	Schlieman's Oil Co. ..	,,	2,800	Philadel.
22	Consolidated Petroleum Co. (Balakani)	Gas	1,292,600	,,
22	Asiatic Petroleum Co. .. (Cardium)	Benzine	1,004,420	Balek Pappan
24	W. Balchin	Lub.	10,400	Hamburg
24	London & India Docks Co..	,,	1,200	,,
24	Fielder, Hickman and Co...	,,	12,800	Philadel.
24	W. Balchin	,,	20,000	,,
	LIVERPOOL—			
18	Meade-King, Robinson & Co.	Resid.	10,000	Trieste
21	,, ,,	Lub.	24,760	Hamburg
24	,, ,,	Spirit	15,500	Rotterdam
24	,, ,,	Lub.	54,400	Baltimore
24	W. B. Dick and Co... ..	,,	12,690	,,
24	,, ,,	,,	2,120	New York
24	Geo. B. Taylor	,,	65,760	,,
24	Burnaby and Chantrell ..	,,	1,010	,,
24	Ismay, Imrie and Co. ..	,,	98,720	,,
24	,, ...	,,	1,200	,,
24	Anglo-American Oil Co. (Delaware)	Lamp	632,800	,,
	BRISTOL—			
20	Pickfords	Lub.	760	Hamburg
20	,, ..	,,	550	,,
24	,, ..	,,	400	,,
24	Anglo-American Oil Co. (Potomac)	Lamp	674,420	New York
	GRIMSBY—			
20	J. Sutcliffe and Son ..	Lub.	880	Antwerp
21	,, ...	,,	480	,,
	HULL—			
20	Wilsons and N.E. Railway Shipping Co.	,,	2,800	,,
20	Hull & Netherlands S.S. Co.	Tar oil	2,220	Rotterdam
20	W. Gilyott and Co... ..	Lub.	34,960	New York
22	,, ..	,,	4,000	Trieste
22	Wilsons and N.E. Railway Shipping Co.	,,	4,000	,,
Dec.	MANCHESTER—			
18	Meade-King, Robinson & Co.	,,	20,800	Hamburg
18	,, ,,	,,	60,600	Philadel.
20	Morton and Sons	,,	1,680	,,
20	Geo. B. Taylor	,,	2,840	Hamburg
20	Bramwell, Fern and Co. ..	,,	530	Antwerp
22	Consolidated Petroleum Co. (Aras)	Lamp	1,237,000	New York
	MIDDLESBRO'—			
20	E. Harris and Co.	Lub.	4,840	Antwerp
	NEWCASTLE—			
18	Tyne-Tees Steamship Co ..	,,	2,000	,,
20	,, ..	,,	400	Hamburg
20	,, ...	,,	160	,,
	PLYMOUTH—			
18	Anglo-American Oil Co. (Potomac)	Lamp	480,320	New York
21	Bristol Steam Nav. Co. ..	Lub.	240	Antwerp
	SWANSEA—			
21	Richards, Turpin and Co...	,,	4,080	New York
	GLASGOW—			
18	Burrell and Son	Resid.	4,000	Trieste
24	Anchor Line	Lub.	66,040	New York
	GRANGEMOUTH—			
18	J. Currie and Co.	,,	220	Hamburg
18	,, ...	,,	3 160	,,
18	W. Graham-Yooll and Co.	Lamp	2,000	,,
	LEITH—			
20	W. Graham-Yooll and Co...	,,	2,180	,,
20	,, ...	,,	2,220	,,
20	J. Currie and Co.	Lub.	400	,,
20	G. Gibson and Co.	,,	1,280	Antwerp
	BELFAST—			
22	T. Dixon and Co.	,,	250	Baltimore
	Total for Week		7,649,920	

FOR THE WEEK ENDING DECEMBER 31ST, 1906—

Dec.	LONDON—			
27	Mordaunt Bros.	Lub.	35,000	Philadel.
27	Worthington and Boler ..	,,	4,000	,,
27	London and India Docks Co.	,,	1,300	Hamburg
29	Anglo-American Oil Co. (Hermione)	Gas	1,627,560	Philadel.
29	,, ..	Lub.	38,040	,,
31	Mordaunt Bros.	,,	4,000	New York
31	G. W. Sheldon and Co. ..	,,	1,020	,,
31	,, ..	,,	340	Antwerp
31	London and Thames Haven Oil Co.	,,	8,000	Reval

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QUALITY TELLS.

To Dealers only.

Date	Port and Importers.	Description.	No. of Galls.	Port Whence.
Dec.	LIVERPOOL—			
27	Pickford's, Ltd.	Lub.	860	Hamburg
27	Meade-King, Robinson & Co.	,,	2,080	,,
27	Crew, Levick and Co. ..	,,	28,010	Philadel.
27	W. B. Dick and Co. ..	,,	29,090	,,
27	Worthington and Boler ..	,,	800	,,
27	A. Hopps and Sons.. ..	,,	2,090	,,
28	Meade-King, Robinson & Co.	,,	20,600	,,
28	,, ..	,,	4,000	Baltimore
28	Liverpool Storage Co. ..	Resid.	2 400	Newp't Nws.
28	Anglo-American Oil Co. (Genesee)	Gas	266,630	Philadel.
28	Bramwell, Fern and Co. ..	Lub.	1,000	New York
29	Liverpool Storage Co. ..	,,	7,200	,,
29	,, ...	,,	4,000	Philadel.
29	Geo. B. Taylor	,,	55,200	,,
29	Vacuum Oil Co.	,,	8,000	,,
29	,, ...	,,	4,780	New York
	BARROW—			
27	Anglo-American Oil Co. (Weehawken)	Naph.	615,060	Philadel.
	BRISTOL—			
27	H. R. James and Sons ..	Lub	16,440	New York
28	,, ...	M.Colza	13,160	,,
28	W. Smith and Co.	Lamp	22,200	,,
28	,, ...	Lub.	77,640	,,
28	Anglo-Bosphorous Oil Co...	,,	2,000	Hamburg
	GRIMSBY—			
27	J. Sutcliffe and Son ..	,,	1,000	Antwerp
29	,, ..	,,	880	,,
	HULL—			
27	Anglo-American Oil Co. .. (Ottawa)	Lamp	750,920	Philadel.
27	,, ,,	Gas	267,090	,,
29	Wilsons and N.E. Railway Shipping Co.	Lub.	240	New York
29	,, ,,	Spirit	40	,,
	MANCHESTER—			
27	Meade-King, Robinson & Co.	Lub	12,480	Hamburg
28	Homelight Oil Co. (Mira) ..	Lamp	1,404,000	Batoum
28	Anglo-American Oil Co. (Delaware)	,,	632,800	New York
	NEWCASTLE—			
27	Furness, Withy and Co. ..	Lub.	17,800	,,
27	Tyne-Tees Steamship Co. ..	,,	1,440	Antwerp
	SOUTHAMPTON—			
27	Barringer and Sons (Turbo)	Lamp	336,000	Hamburg
	DUNDEE—			
27	D. Alexander and Sons ..	Lub.	200	,,
	GLASGOW—			
26	Anchor Line	,,	21,000	New York
26	J. D. Smellie and Co. ..	Spirit	20,000	Rotterdam
27	J. and A. Allan	Lub.	4,300	Philadel.
Dec.	GRANGEMOUTH—			
27	J. Currie and Co.	Lub.	2,880	Hamburg
27	W. Graham-Yooll and Co...	Lamp	2,000	,,
	LEITH—			
26	W. Graham-Yooll and Co...	,,	4,360	,,
26	J. Currie and Co.	Lub.	8,020	,,
26	Henderson and McIntosh ..	,,	66,840	Philadel.
27	W. Graham-Yooll and Co.	Lamp	7,760	Hamburg
27	G. Gibson and Co.	Lub.	200	Antwerp
	DUBLIN—			
27	Alliance and Dublin Consumers Gas Co. (Rion) ..	Gas	746,600	Ibrail
	Total for the Week ..		7,211,350	
	Total for the past Fortnight ..		14,861,270	

AMERICAN PATENTS.

Continuous Still and Condenser.—Robert W. Erwin, St. Louis, Mo.

In an apparatus of the class described, a boiler, a tubular column rising therefrom, perforated partitions horizontally arranged in said column, a vapour-conveying tube vertically arranged through each partition, a circular wall fixed on each partition and surrounding the lower end of each tube, the top of which wall is in a plane above that occupied by the lower end of the tube, a circular wall fixed on each partition around the upper end of each tube, the upper end of which wall is in a plane above that occupied by the upper end the tube, and an open-bottomed cap arranged over the upper end of the tube and the circular wall surrounding the same, the lower end of which cap is in a plane below that occupied by the upper end of the wall which said cap incloses; substantially as specified.

Oil Feed Device.—Herbert O. Spade and Henry E. Spade, Vicksburg, Mich.

The combination of a cylinder having a longitudinal slit and delivery passages therein, there being perforated ears on said cylinder, arranged on opposite sides of said slit; a bolt arranged through said ears; a spring on said bolt for applying tension to said cylinder; a plunger having a plurality of cylinder-like charge-pockets, and passages opening into said pockets, adapted to register with the delivery passages of said cylinder when the plunger is in one position; a plunger rod having tapped shoulders thereon slidably arranged through said plunger; plungers for said charge-pockets; a cross-head on said plunger rod through which said charge-pocket plungers are slidably arranged and adjustable tappets for the said charge-pocket plungers, for the purpose specified.

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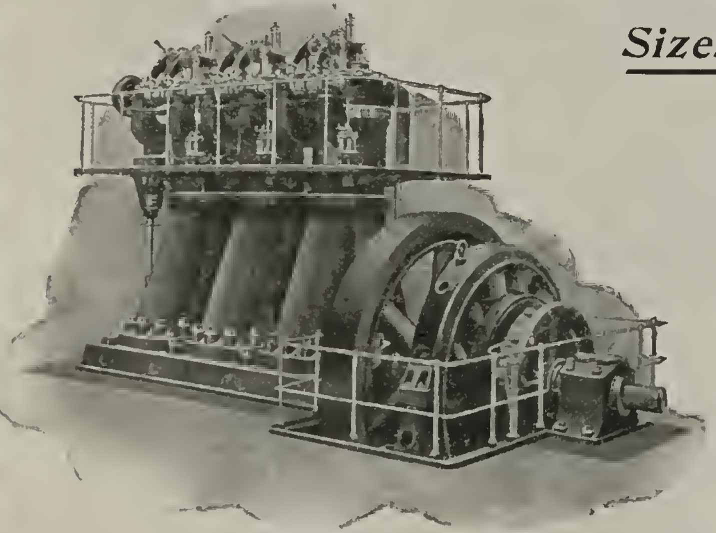

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The Petroleum Review.

By PAUL DVORKOVITZ.

Vol. XVI. *(New Series.)* January 19th, 1907. No. 390.

Editorial Notes.

Our Brief Retrospect.

In accordance with our general custom we are continuing our brief retrospect of the world's petroleum fields in 1906, and in this issue we give an instructive and specially written *resumé* of the past year's history in connection with the Russian oil fields. As our readers have gathered from what has already appeared in the Review, 1906 had few good things to tell. It was a period during which the Russian petroleum industry made determined efforts to pull itself round that corner which has always stood between it and permanent success. And we have good reasons for believing that in this respect much was accomplished. In every case we know that many things combine to constitute a crisis such as occurred in Russia last year, but the primary cause of it all was the feeling of unrest which permeated the whole of the oil field workers. For the time being this has been swept away, and it can almost be taken for granted that the labours of the committee now discussing the matter at Baku will be successful in that a continued state of contentment will prevail. Given this one thing, apart from everything else, and the Russian petroleum industry will soon recover and again occupy its late proud position as a petroleum producing and exporting country standing only second to one in the universe.

December in the Pennsylvanian and Mid-Continent Oil Fields.

In the Pennsylvanian fields the closing month of the year furnished nothing of a startling nature, and 1906 closed without any developments of an important nature being recorded. Scarcity of likely territory considerably restricted operations during the month, and there is little or no promise for the future. In fact, in all the districts producing Pennsylvanian oil there is nothing in prospect that promises to bring about an increase in production, and the seriousness of this state of things is added to by reason of more wells being abandoned each month than new ones completed. One satisfactory feature about the wells in the light oil producing regions during December is that their average production was somewhat greater than was the case a year ago, the average of 7¾ barrels daily then now being 8¾. In the Mid-Continent fields, and also in Illinois, remarkable progress is being made with regard to pipe line facilities, and, though these are still inadequate, great improvements are constantly being brought about. During December the Mid-Continent pipe lines registered daily runs of 70,000 barrels, this figure exceeding all previous records. On the other hand, the shipments shewed a decline, and consequently the field stocks were again increased, in spite of the effort that still prevails to curtail production. Thus, in the Kansas fields, the year 1906, which has been so full of surprises, closed amid events the like of which have never before been witnessed during any oil field boom.

The Operations of the Nederlandsche Industrie en Handel Maatschappij during 1906.

From the figures published upon another column, readers will be able to form a fairly good idea of the state of things that has prevailed in Borneo during the past year. The details now published deal with the operations of the Nederlandsche Industrie en Handel Maatschappij, the "Shell" Co.'s concern in the Far East. They require some explanation, otherwise conclusions might be arrived at which would be contrary to fact. For instance, it will be noted that the total production of crude oil for the year has been considerably below what it was during 1905, the decrease being about 70,000 tons. The main explanation here is that the figures for 1905 were somewhat abnormal on account of a fountain which was struck during the last 13 weeks of that year, and this naturally brought about a largely increased production, and resulted in excessive stocks. Still there has been a slight falling off in production, which may be taken at about 2,000 tons per month, though the figure does not take into account the abnormally increased yield during the last few weeks of 1905. The output of the refineries has been practically the same as last year, but the shipments display some increase principally in regard to petroleum products other than kerosene. The stocks of crude oil above ground have been considerably reduced during the year—certainly a satisfactory move—while those of kerosene awaiting shipment have also been substantially curtailed, amounting now to little more than one-half of the figures of a year ago. We hope shortly to go fully into the question of the future of the Far Eastern fields.

The Baku Association and its Labours.

If one thing made itself manifest more than another at the recent annual meeting of the Baku Petroleum Association it was that the organisation itself needs to put its house in order. For some years the outgoings have been exceeding the income by a few hundred thousand roubles, and as is bound to happen sooner or later in all such cases, the time has come when there should be a serious reckoning. To attempt to reduce the expenditure is practically out of the question, for if certain of the good works which the Baku Association carries on were, for the sake of economy, cut off, there would still be a deficit. Therefore the only direction in which a move can be made is toward increased support. Until the present time, the association has been benefiting the employés of certain firms who do not contribute towards its working expenses, and this being so, we are sure the proposal of Mr. Goukassoff, which was carried by the meeting, to compel these outstanding firms either to assist in maintaining the association or to refuse their employés the use of the association's institutions, is nothing but fair. We only hope that those firms who are at present benefiting without contributing toward the cost will recognise the false position in which they stand, and no longer withhold their hand from subscribing to an association which is carrying on a most noble and useful work—a work which in the past has only been minimised by the lack of funds.

◆

THE TIN PLATE MARKET.

Messrs. Norton, Owen & Co., of 4, Bishopsgate Street Within, London, E.C., report under date 17th January, 1907, as follows :—

This market is active and makers' quotations are very firm, although quantities of plates in second hands have been offering. At the quarterly meeting of the iron, steel and tin plate trades at Birmingham on the 10th inst. prices of raw materials were exceedingly strong, and tin plate makers reported that they were employed to the fullest capacity of their mills, and being hardly pressed for prompt deliveries of tin plates. A large amount of business in oil sizes has been put through in the past fortnight, chiefly for the Far East and Russia, and the undermentioned prices have been freely paid. We append particulars of shipments of tin plates which, it will be seen, are highly encouraging, the aggregate tonnage for 1906 (375,414 tons) being the largest since 1891 (the year following the passing of the McKinley Tariff Bill in the United States), when the shipments for the year to all countries reached the abnormal total of 448,379 tons, whereas in 1898 they dwindled down to 250,953 tons.

IC	18¾ × 14	124 sheets	110 lbs.	15/6 per box.
IC	19¼ × 14	120 ,,	110 ,,	15/6 ,,
IC	20 × 10	225 ,,	156 ,,	21/9 ,,

F.o.b. Wales. Tin lining and iron hooping extra,

SHIPMENTS OF TIN PLATES.

	Month ended 31st December.			Year ended 31st December.		
	1904. Tons.	1905. Tons.	1906. Tons.	1904. Tons.	1905. Tons.	1906. Tons.
Russia ..	2,825	12	1,615	30,530	6,393	4,849
Germany ..	1.913	2,067	3,395	20,801	29,702	36,998
Netherlands ..	4,485	2,049	2,958	20,168	26,743	27,820
*Belgium ..	—	1,284	1,015	—	8,821	11,994
France ..	1,418	1,345	1,664	14,194	14,228	24,341
*Portugal ..	—	845	631	—	9,109	10,214
U.S.A. ..	7,567	3,266	6,783	71,862	63,050	61,518
B.E.Indies .	4,160	2,324	1,899	41,491	44,138	47,725
Australia ..	1,002	1,914	1,311	13,303	17,449	16,159
Canada ..	984	996	1,513	17,062	21,238	19,986
Other Countries	18,289	8,652	8,377	130,223	113,993	113,810
Total weights	42,643	24,754	31,161	359,634	354,864	375,414
Total Values—	£545,252	£317,773	£419,928	£4,595,568	£4,566,984	£4,946,128

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SEVERE EARTHQUAKE SHOCKS AT BAKU.

A special cable to the Review received in London last night (Friday) at 8·45 from St. Petersburg states several severe earthquake shocks were felt during the afternoon in the Baku oil fields. No details are to hand.

THE HOMELIGHT OIL COMPANY, LTD.

A CONVIVIAL EVENING.

A very enjoyable evening was spent at the City Arms Restaurant, London, E.C., last Friday, when the employés of the Homelight Oil Co., Ltd., held a Bohemian concert. It augers well for success when a spirit such as was manifest at last week's concert prevails between employer and employed, and the pity of it is that such convivial events are not more numerous in connection with the companies engaged in the distributing oil trade.

The chair was appropriately taken by the general manager of the company—Mr. J. B. Mc Clurg—who was supported in the vice-chairs by Mr. J. C. Goodall. the manager of the London branch, and Mr. G. H. Watson, of Manchester. The whole of the members of the staff of the general offices were present, while among the company's representatives throughout the country who accepted the invitation to be present we noticed Messrs. W. N. Bates (Hull), S. C. Goodman (Cardiff), P. W. Turner (Glasgow), and all the Superintendents of the London branch, while there were also present Mr. A. Goukassoff, Dr. P. Dvorkovitz, Mr. C. E. Stroud (secretary and assistant manager), Mr. F. W Parry (late secretary and assistant manager), Mr. F. Gilbert (Baltic Trading Co.), Mr. W. R. Dunn and Mr. Carley.

In opening the programme, the chairman in a few well chosen words referred to the friendly relationship which existed between the employers and employed in connection with the Homelight Co., mentioning that it was this friendly feeling that had done so much in the past to promote the best interests of the company. He welcomed the whole of the company's representatives to that evening's conviviality, and expressed the hope that each and everyone would spend a very pleasant time.

The programme, which was of exceptional merit, hap been well arranged by a committee consisting of Messrs. J. Fulton, J. Guidini, F. W. Hardy and Quartermaster Sergeant Cole, the stewards being Mr. R. S. Jamieson and Mr. C. Barter. But the greater portion of the arduous duties fell upon Mr. Thos. Williams who officiated as the manager and hon. secretary, and an admirable secretary and manager he made.

During a break in the programme, Dr. Dvorkovitz proposed the toast of "Success to the Homelight Oil Co. and its employés" which, needless to say, was received with acclamation by all present. In submitting the toast, the speaker traced the successful history of the "Homelight"—success which was due principally to the excellent general manager which the company had, combined, with that friendly spirit which permeated the whole staff from the highest to the lowest.

Mr. A. Goukassoff briefly and pointedly replied, after which the programme was continued, a most pleasant evening closing with the hearty singing of the National Anthem.

The Russian Petroleum Industry during 1906.

A BRIEF . . RETROSPECT.

So far as Russia is concerned the year just concluded has been one full of troubles and tribulations for those engaged in the petroleum industry, and its history will stand out as though written in red.

At the dawn of 1906 the industry was just commencing to recover from the effects of the disasters which befell it during the latter part of the preceding August, when, as our readers well know, two-thirds of the wells were destroyed by incendiary fires, all movable property plundered, and numbers of workmen and employés murdered. In spite of the strenuous efforts made by the producers, and the aid given them by the Government, the general political and economic disorganisation which prevailed throughout the whole year, together with the resulting scarcity of money, has done much to prevent this industry regaining its normal position. The slow progress made in the work of restoration is best shewn in the following figures of production and numbers of producing wells month by month :—

	Production. In Poods.	Number of Producing Wells.
January	34,200,000	1,013
February	31,100,000	1,171
March	38,700,000	1,316
April	41,500,000	1,400
May	42,100,000	1,467
June	38,500,000	1,247
July	22,700,000	1,141
August	26,400,000	1,275
September	39,900,009	1,593
October	43,900,000	1,613
November	41,500,000	—
December (estimated)	42,000,000	—
Total	442,500,000	—

In 1905 the total crude oil production was only 414,700,000 poods, so that the past year shews an increase against 1905 by only about 28,000,000 poods. If we make comparisons with a normal year—for instance, 1904 - we find that the total production was 614,600,000 poods, so the past year shews a falling off of production of nearly 28 per cent.

The production by spouters for the year may be estimated on the basis of the published statistics for the first ten months, at about 9,000,000 poods, as against 14,700,000 poods in 1905, and 35,200,000 poods in 1904.

It will be observed from the figures of monthly production that after this had, by the strenous efforts of the producers, been brought up to 42,000,000 poods in June, a decline set in, this being due to the outbreak of a strike, the effects of which are seen in the figures for June, July and August.

It was this feeling of uncertainty of the attitude of the workmen which, more than anything else, has prevented the return of normal conditions. The monetary crisis was partly eliminated by the loans granted by the Government to the producers for the purpose of making good the damage done to their properties during the catastrophe of the previous August.

The refiners of course have to share the fate of the producers, for they could not work without adequate supplies of crude oil. The large refiners had to keep down their output whilst most of the small ones had no alternative but to close. As an instance of this we see that in September last only eighteen kerosene refineries and seven lubricating oil refineries were operating, while in November of 1904, for instance, the figures were sixty and seventeen respectively.

The refinery statistics are available only for the first nine months of the year and these shew that during that period the kerosene refineries distilled 211,000,000 poods of crude oil, which is less by 50,000,000 poods than a corresponding period of 1905. Of course this balance may be slightly altered when the full details of the year are available, for judging by the progress in regard to production during October-December it is almost certain that the decrease in the distillation of crude at the refineries will be shewn to be much less for the whole year than that recorded above.

The two years of crisis have wrought great changes in the marketing conditions for Russian petroleum products. The Far Eastern markets, where in former times Russian oil predominated, were for a time, at least, lost altogether. In Europe also the Russian petroleum exporters had to reduce their operations and yield a large part of their trade to their competitors, American, Austrian and Roumanian. The chief anxiety through the past year both of those engaged in the petroleum industry and also of the Russian Government has been how to keep up an adequate supply of liquid fuel for the home market, which is the mainstay of the Russian petroleum industry. The shipowners on the Volga and the manufacturers in Eastern and Central Russia use oil fuel almost exclusively, and the scarcity and enormous advance in the price threatened them with ruin. Those that could replace oil by coal, wood or peat fuel, did so, but the majority implored the Government to take some steps to relieve the crisis. A series of conferences were held to consider this matter and a number of extraordinary measures were adopted, by which it is hoped that it will be possible to make the supplies now available in the interior to last until fresh supplies are procurable from Baku, when navigation on the Volga reopens in the spring.

Of the kerosene trade on the Russian home market during the past year there is little to be said. The consumption in Russia, compared to the population, is so small that a decrease is hardly possible, and for years it has remained practically stationary.

The manner in which the products of the Baku petroleum industry were distributed between the different markets during the past year, is clearly shewn in the statistics of deliveries from Baku during the first 10 months of the year. These statistics shew that the total quantity of petroleum products dispatched from Baku during the first 10 months of 1906 was:—

	Ten Months, 1906.	Ten Months, 1905.
Illuminating oil	60,179,285	71,456,367
Lubricating oil	12,617.906	10,547,787
Residuals	201,058,684	262,139,667
Crude oil	30,255,485	23,635.522
Other products	1,411,877	1,238,140
Total	305,523,177	369,017,483

These products were distributed among the various destinations as under:—

	Ten Months, 1906.	Ten Months, 1905.
To Batoum..	25,707,663	28,540,507
Other places in the Caucasus	13,358,244	11,622,908
To Petrovsk by rail ..	2,124,692	1,916,267
To Astrakhan	249,225,139	302,703,400
To Petrovsk by sea ..	2,450,146	9,743,973
Transcaspian Province ..	6,780,708	8,438,381
Other Russian Ports ..	3,028,139	2,866,594
To Persia	1,041,941	1,207,966
By road	1,806,505	1,977,486
Total	305,523,477	369,017,483

In the above figures the export trade is represented by the deliveries to Batoum (with exception of 2,000,000 or 3,000,000 poods shipped from there to other Russian ports; a portion of the quantities sent to Petrovsk were exported *via* Novorossisk, and there is also the quantity shipped to Persia by the Caspian Sea.

The total exports of petroleum products from Batoum to European markets from January 1st to 23rd December, 1906, amounted to 20,500,000 poods against 28,000,000 poods in the corresponding period of 1905. These totals include:—Illuminating oil in 1906, 11,780.000 poods, against 19,780,000 poods in 1905; other products, 8,240,000 poods, against 8,720,000 poods in 1905. The exports to eastern markets, consisting almost exclusively of illuminating oil, amounted to 8,100,000 poods in 1905, against 9,600,000 poods in 1905. These eastern countries represent chiefly Turkey, the Balkan States and Egypt, in which markets Russian oil, thanks to geographical conditions, must always predominate. In Egypt the trade in Russian oil has been kept up by Messrs. Mantascheff and Co., who transferred part of their case-making and filling machinery to Alexandria and established a case factory there, which has been working very satisfactorily.

The past year has seen the long delayed completion and opening of the Baku-Batoum pipe line, but on account of the nature of the circumstances which prevailed in the industry during the year, it proved but of little benefit. The hopes based on the pipe line were for an increased carrying capacity of the Transcaucasian railway, by which the pipe line is controlled, and which would enable the railway to transport all oils available for export, and a cheaper rate, made possible by smaller working expenses of the pipe line. So far none of these hopes have been realised; the quantities available for export were so small that the railway would have been able to transport them without the aid of the pipe line, and as to the rate, the Government has so far declined all requests for a reduction.

The new year, however, opens with fairly good prospects for the Russian petroleum industry. As we go to press we hear that the joint committee of workmen and employers, agreed upon at the St. Petersburg Conference, is now being formed at Baku. This is expected to settle the labour question and thus remove the chief disturbing factor threatening the future of the industry. Given a period of peace, it will not be long before the production will again rise to its normal level of about 50,000.000 poods per month. The combination among the principal Russian petroleum exporters, and agreement with the leading exporters of Austrian and Roumanian exporters for concerted action on the European markets, holds out hopes of better conditions for the export trade, but only the future will shew to what extent these hopes will be realised. It is sufficient for us to say that for the present everything points to a year of comparative prosperity for those engaged in the Russian petroleum industry.

(*To be continued.*)

THE BRITISH PETROLEUM COMPANY, LIMITED.

OFFICIAL LIST OF DIRECTORS.

The amalgamation of the interests of the General Petroleum Co. and the Consolidated Petroleum Co. into the new company known as the British Petroleum Co., Ltd., is still being placed upon a working basis. It will be remembered that the registration of the new concern was made on November 21st, 1906, the capital being £500,000, and the offices being situate at 22, Fenchurch Street, E.C.

During the present week the directors for the company have been elected, the following being the official list:—

Mr. Jules Aron, 21, Rue Lafitte, Paris, engineer.
Mr. Maurice Baer, 21, Rue Lafitte, Paris, engineer.
Mr. Frederick Lane, 26, Great St. Helens, E.C., merchant.
Mr. Thomas R. Kean, 3, 4 and 5, Rood Lane, E.C., merchant.
Mr. Hans Olsen, c/o Messrs. Nobel Bros., St. Petersburg, merchant.
Mr. Herman Janson, 3, 4 and 5, Rood Lane, E.C., merchant.
Mr. Elkan Heinemann, c/o Deutsche Bank, Berlin.
Sir Edward Fitzgerald Law, Army and Navy Club, London, S. W., gentleman.
Dr. Arthur Herz, 3, 4 and 5, Rood Lane, E.C., merchant.
Mr. H. Moditchian, 70, Cornhil, E.C., merchant.

The notice as to the winding up of the company, which is given in the articles of association, read as under:—

If this company shall at any time be wound up (except for the purpose of re-construction or amalgamation), while the Europaische Petroleum Union Gesellschaft mit beschrankter Haftung, or its successor in business, shall be a shareholder in this company, the liquidator of the company shall not sell or dispose of all or any part of the undertaking, property or effects of this company to any other person or company without having first offered the same for sale to the said Europaische Petroleum Union Gesellschaft, etc., or its successor in business, at the same price, and on not more onerous terms.

ROUMANIAN RAILWAYS AND THE PETROLEUM INDUSTRY.

An important conference has recently been held at the offices of the Administration of the Roumanian State Railways between the director of the State railways and representatives of the principal Roumanian petroleum refiners and exporters. The main question for discussion was the transport of petroleum product, from the refineries in the Prahova valley to Constantza. The representatives of the petroleum industry pointed out the inadequate nature of the facilities provided by the railway. No more than three oil trains are despatched daily; each train carries about 360 tons of oil, making a total daily delivery of 1,080 tons, or 32,000 tons per month. The production is now at the rate of about 800,000 tons per annum, and, after allowing for home consumption, there is left for export from 40,000 to 45,000 tons per month. The railway under present conditions being capable of transporting 32,000 tons per month, the remaining 10,000 to 12,000 tons constitutes a burden on the refiners filling up their storage tanks and compelling them to restrict their output, whilst the smaller ones have to cease operations altogether for a time. The cause of this trouble is the shortage ot locomotives on the railway. The refineries have their own tank waggons in quite sufficient numbers, but are unable to make use of them for want of locomotives, which they have hitherto not been permitted to provide themselves. Permission has been lately granted to them to have their own locomotives, but of the same type as those used on the State railways. These locomotives are not only very dear, but are difficult to obtain promptly as the firms making them are now full of orders. Other contributory causes are the insufficient number of sidings and loop lines, and the long time which trains take to make the trip to Constantsa.

Mr. Miclescu, Director-General of Railways, admitted the justice of these complaints. He agreed that the number of trains on the Constantza line should be increased to at least five per day, also that the complete trip to Constantza and back ought to be made in 48 hours. All this, however, could not be carried out immediately. The railways themselves suffered from the present state of affairs, as they could not always get prompt delivery of the residuals required by them for firing their locomotives. On certain occasions they were compelled to make hurried purchases of coal to take the place of the residuals which they could not bring up in time.

After some discussion the following steps were agreed upon:—The number of oil trains run daily between Prahova and Constantza should be increased to four, and an increased speed attained so as to ensure a total transportation of 40,000 to 42,000 tons per month. The Administration of State Railways will endeavour to find means to increase the speed of trains running on this section.

The petroleum refiners will be allowed temporarily to do their own repairs of their tank waggons. The export firms are to increase the number of railway sidings at their installations, and increase their facilities for unloading tank waggons into their tanks at Constantza. It was further agreed that the petroleum companies are to present to the Administration of the Railways a memorandum setting out in detail all the shortcomings of the railway service and suggesting means for satisfying the present and possible needs of the petroleum industry in transport facilities, both for the export and home trades.

THE AUSTRIA-HUNGARIAN REFINERS' CARTEL.

The organisation of the crude oil producers in Galicia having now been settled by the reorganisation of the Petrolea Co., and the adhesion to the new agreement of 80 per cent. of the producers, negotiations have now commenced for the coming renewal of the refiners' cartel, which expires on April 30th next. In this connection it is of interest to reproduce some details concerning the cartel published in the latest issue of *Naphtha.*

The present cartel was formed on 30th October, 1903, for a period to end on 30th April, 1907. In the agreement for the respective participation of the various refineries, the home consumption was put down at about 250,000 tons, *i.e.*, about 15,000 tons more than in the previous agreement. This assumption has, however, not been justified by facts, as in 1904 the consumption was 240,019 tons, and in 1905 only 236,953 tons. Of the total home consumption 35,000 tons per annum was allowed to the small refineries in Galicia, Bukowina and Upper Hungary, whilst the remainder was divided among the large refineries. Three large refineries and ten small ones have recently joined the cartel, so that it now includes 32 large refineries and 62 small ones. The total home consumption of Austria-Hungary being insufficient to take up the whole output of the refineries in the cartel, a certain part of the same was set aside for export, and some of the larger refineries, which are favourably situated for export trade, have agreed to renounce part of their share in the home trade in exchange for an equivalent increase in their share in the export trade. The nominal share of these export refineries in the home trade amount to 140,000 tons, and the remaining 210,000 tons are divided among the inland refineries. In order to bring about the formation of the cartel the majority of the large refineries have had to make a further sacrifice by guaranteeing to certain refineries the irreducibility of their share in the trade. This sacrifice proved itself no inconsiderable one, and necessitated reductions in the quota of the other refineries. In the last trading year the reduction was as much as 15 per cent., and in the current year it is expected to be still larger, The cause of this is the declining consumption in Austria-Hungary and building of new refineries.

The Vacuum Oil Co. has, two years ago, erected two large refineries, one at Dziedzitz, in Austria, and another in Almos-Füzet, in Hungary. An agreement was concluded between the cartel and the Vacuum Co., whereby each of these two refineries was allotted 5,500 tons in the supply of the home market. In return, the Vacuum Co. undertook to refrain from selling in certain foreign markets where the Olex Co., the export organisation of the cartel, predominates. The construction of several new refineries is also contemplated, including one large one one by the new Kraft und Licht Gesellschaft, formed by the French Refiners' Syndicate.

It is clear from all the above that the cartel cannot be renewed on the old basis, and there is hardly enough time left to arrange for a new agreement before the old one expires, the trade will exist therefore without a cartel for a time.

One of the proposals now under consideration is that the whole petroleum trade, both foreign and inland, shall be concentrated in one agency, such as the Olex Co. A fundamental price will be fixed for crude oil on the basis of the actual cost of production; prices will also be fixed on each petroleum product according to the cost of its production, and then a scale will be arranged for distributing the surplus realised among the producers and refiners according to the quantity of crude oil or petroleum products supplied by them. This proposal seems to be a fair and simple solution of the problem, although the change would be of such a radical nature that there are bound to be difficulties in the way, the removal of which will involve protracted negotiations.

THE ANGLICIA PETROLEUM COMPANY, LIMITED.

ANNUAL MEETING.

The fourth annual meeting of the shareholders of the Anglicia Petroleum Co., Ltd., was held last week at Winchester House, London, E.C., the Chairman of the company—Mr. A. R. Holland—presiding.

In moving the adoption of the report and balance sheet, an extract of which appeared in the last issue of the Review, on page 19, the Chairman said that during the year they had had to deal with adverse circumstances so far as the export trade was concerned; but he was hoping that on the whole the shareholders would not consider the accounts as being altogether unsatisfactory. He and his colleagues fully realised that so long as they were not in a position to declare a dividend on the whole of the capital invested in the company, the result could never be satisfactory to their shareholders; but he scarcely needed to say that every effort was being made on their part to arrive, as soon as possible, at that most desirable result. During the year under review, the profits derived from the home trade had been much more satisfactory, realising a gross profit of no less than £97,000, though, of course, there were very heavy expenses to be deducted. That profit was derived almost exclusively from the refinery, the oil fields, after deduction of the depreciation, leaving very little margin indeed. The depreciation amounted to £24,658, and that, after spending considerable sums, both at the oil fields and also at the refineries, on the maintenance and up-keep of buildings, plant and machinery. With reference to their oil fields at Schodnica, for which the old Anglo-Galician Co. paid such a large amount of money, he was sorry to say that the production seemed to be gradually diminishing, and at the present moment amounts to a little under 28 tons a day. He was afraid these results would continue, and whatever action was taken the general tendency of these oil fields must be to diminish in output. Every effort was made to maintain their present output by every means that suggested themselves to their technical staff on the spot; but the directors were firmly convinced it would be most unwise to attempt to sink any new shafts at Schodnica, at all events until the deep test shaft now being sunk, there was giving far more favourable results than, unfortunately was the case at present; for he was sorry to say that, in spite of the shaft being down over 900 metres, there were very few traces of oil or gas—in fact, there were hardly any. With reference to Boryslaw, the production during the twelve months under review amounted to 23 tons gross, or a little under 2,000 tons a month. During the early months of last year that production, unfortunately, diminished considerably; but in September last additional shafts came into production, and the total production at Boryslaw from May 1st to the end of December amounted approximately to 15,000 tons, or a little over 2,000 tons a month, which gave a slightly better average than that for the year under review. Quite recently several of their other shafts had commenced erupting, and they hoped it would only be a matter of a very short time before their production at Boryslaw still further increased.

Proceeding to speak of Tustanowice, where, on the strong recommendation of their managing director and their managers, they had from time to time sanctioned the purchase of considerable plots of oil land, he was glad to be able to state to the shareholders present that recent developments there had particularly gone to prove the value of that land. Their company had sunk two shafts on the property, one of which had already reached a certain depth. It had commenced erupting, and they hope it would not be long before they had a good productive shaft at Tustanowice. With reference to their refineries, that was the bright spot in their business. He was pleased to state that the various extensions sanctioned from time to time by the board, had all given very satisfactory results, although, owing to the limited funds at their disposal, the directors were not able to sanction the installation of as complete a lubricating oil plant at the refinery as they would have liked. What had been done had up to the present given very good results. The quality of all their manufactures was being steadily improved as far as possible, and some of them in particular would now compete very fairly with, if they did not excel, the quality of any other make in Austria or Hungary.

He concluded by moving the adoption of the report which authorised the payment of a dividend of 7 per cent. on the first preference shares.

Mr. Charles Lock seconded this, which, on being put to the meeting, was carried unanimously.

Mr. W. R. Von Ofenheim was then unanimously appointed a dirictor, and Mr. Charles Lock was re-elected to a similar position.

In reply to his election, Mr. Ofenheim said he was extremely sorry that until the present time the company had not been able to pay dividends on the whole of the share capital, but they had not to forget that their resources were limited to the amount raised on the occasion of the reconstruction of the old Anglo-Galician Oil Co. The assets taken over from that company had given little or no revenue since, so that all they earned at present was earned by the new capital. It was with that that they had extended their refinery, acquired new and valuable oil fields, and built up a business which was considered to be one of the most important in Austria-Hungary. The extension and reconstruction of the refinery had proved to be a very sound investment.

The proceedings then terminated.

PRODUCTION OF ENGLISH COMPANIES IN RUSSIA.

Baku Russian Petroleum Co., Ltd.—The production for the week ended 5th January was 245,000 poods, or 3,949 tons; and for the week ended 12th January was 264,000 poods, or 4,256 tons.

Russian Petroleum and Liquid Fuel Co., Ltd.—The production for the week ended January 6th was 200,000 poods, or 3,225 tons; and for the week ended 13th January, 182,000 poods, or 2,934 tons.

Spies Petroleum Co., Ltd.—The output for the week ended 6th January was 120,045 poods, or 1,936 tons; and for the week ended 13th January, 112,745 poods, or 1,818 tons.

The European Petroleum Co., Ltd.—The production for the week ended 6th January was 145,170 poods, or 2,340 tons; and for the week ended 13th January was 148,251 poods, or 2,390 tons.

MISCELLANEA.

THE GULF COAST FIELD DURING 1906.

The production of oil at the Gulf Coast fields during the year 1905 has approximately been 20,000,000 barrels (of 42 gallons each), this quantity making up a total from these regions for the past six years of over 121,000,000 barrels. The Jennings field last year was the largest producer, yielding about 7,500,000 barrels, against 8,800,000 barrels for 1905. Next in point of quantity produced came the Humble territory with a production of 3,500,000 barrels. This was a remarkable drop from the 15,500,000 barrels produced in the same territory during 1905, and principally accounts for the deficit in the total production of the Gulf Coast fields in oil production during last year, for, as compared with the figures of 1905, there is a decrease of about 16,000,000 barrels, the exact production of that year being 36,526,000 barrels. Sour Lake, Batson and Saratoga all produced between 2,000,000 and 3,000,000 barrels each last year, as against 3,500,000 barrels for 1905, while Spindle Top came forward with 1,034,000 barrels to its credit, this being a decrease of 600,000 barrels when compared with the output for 1905 from this famous field. Up to the present time, no field in the Gulf Coast region had produced oil in such quantities as the old heights of Spindle Top where, during the boom in 1902 nearly 18,000,000 barrels were produced. Humble is the next territory in importance as a producer, for in 1905 it yielded about 15,500,000 barrels, while third on the list of large fields we get Batson Prairie, which in 1904 was responsible for nearly 11,000,000 barrels.

THE TARANAKI PETROLEUM COMPANY OF NEW ZEALAND.

The first statutory meeting of shareholders of the Taranaki Petroleum Co. was held at New Plymouth on October 31st.

There was considerable discussion on the motion for adoption of the directors' report, which stated that there was much undesirable trafficking in paid up shares.

The chairman said this trafficking was not among the directors.

Mr. Fair, the company's manager, stated that work was progressing well. There were many difficulties and it was their duty to feel their way in new country. He was sure payable oil would be found in No. 3 bore. No. 2 bore was down 1,270 feet. The "Birthday" well was a good one but No. 2 would be better.

A shareholder objected to Mr. Fair's position as manager and director—he could pull directors' legs how he liked.

Mr. Fair replied that he was only there to get oil for the company.

The meeting was eventually adjourned.

ROUMANIAN PETROLEUM EXPORTS DURING NOVEMBER.

The total quantity of petroleum products exported from Roumania during November was 16,528 tons, of which 560 tons was crude oil, distillate, gas oil, etc.; 15,123 tons of illuminating oil; and 845 tons of benzine.

The exports were distributed among the different countries as under:—England, 5,135 tons; France, 5,407 tons; Turkey, 2,833 tons; Italy, 2,045 tons; Germany, 774 tons; other countries, 333 tons.

The total exports shew a decline against November, 1905, by 15,415 tons.

LATEST FROM THE GALICIAN OIL FIELDS.

From Tustanowice it is reported that the Laura well of Messrs. Becher, Goldstein and Co. became productive at a depth of 1,160 metres, yielding 40 tons of oil per day. The well is being drilled deeper, and the output is increasing, The neighbouring Bertold well of the same firm yields from a depth of 1,135 metres 15 tons daily. Drilling of the well is continued in hard rock. Notwithstanding the rather difficult conditions under which the drilling of these two wells was carried out, they were completed within 25 months. The end diameter now is 26 inches, and the well can therefore be easily drilled deeper.

Well No. 1 of Messrs. Dlugosz and Laszcz has settled down to a steady yield of 80 to 90 tons daily. The first eruption occurred on the Sas property of Messrs. Dziedugzycki and Co. On the Litwa plot, well No. 2, after being repaired and deepened hy one metre, has increased its output. Well No. 3 is shewing good traces of oil.

On December 14th, an outbreak of fire destroyed the derrick and machinery on the Arthur plot of Messrs. Goldhammer and Lipinski, at Boryslaw.

CONDITIONS IN THE ILLINOIS FIELDS.

Latest reports from the Illinois oil fields shew a tendency to a settlement down to more normal conditions than have prevailed in the past. This is brought about by the fact that the system of oil transportation from the field has greatly improved of late, and the obstacle which caused an almost total suspension of operations some weeks ago has for the most part been removed. All indications point to a most busy spring, for it must be remembered that there is a vast tract of undeveloped territory in the field which is capable of supplying large wells. For the past few months, a large percentage of the work has been the testing of leases to determine their value, and the result has been that hundreds of acres have been found to be very prolific in production. This is particularly the case with regard to Lawrence county, where many of the farms have had but a single well upon them. As compared with the deep sand territory in West Virginia, five wells can be completed in the time required to complete one in the former field, and the cost to complete a well in Illinois is about one-fifth that of a well in West Virginia. Therefore, it is safe to predict that in the coming spring many operators with limited means will prefer Illinois rather than venture in the West Virginian fields.

BORING OPERATIONS IN EAST GALICIA.

Naphtha publishes some interesting particulars concerning the state of boring operations in various oil fields in East Galicia. From these, it appears that at Stoboda Rungurska, Mr. B. Friedman has 21 boreholes, the deepest of which is 300 metres, and he has had a total monthly production by pumping of about 130 tons. Mr. Aderbale has 20 wells, which yield about 120 tons per month. Mr. E. Torosiewicz is receiving from his four wells about 30 tons per month, and a similar quantity was obtained by Mr. I. Torosiearcz from his five wells. The best producers are the two boreholes of Mr. Paul Kristen, which together yield 170 tons per month. On the parish lands 40 tons per month are produced, and on the Crown lands 30 tons, whilst the wells of Messrs. Margulies and Co. and Messrs. Alter Salpeter and Co. produce less than 10 tons per month each.

At Kosmacz, there are seven boreholes of the Galician Savings Bank, which produce 80 tons per month. Twelve wooden tanks hold the stock of crude oil of the Bank, amounting to 800 tons. The Savings Bank has also a borehole at Kosmacz village in drilling, and is now at a depth of 150 metres. The Trzebinia Co. are also drilling a well, which has already attained a depth of 385 metres, but shews no traces of oil.

At Bitkow there are seven boreholes belonging to Messrs. Marchwicki, Biedermann, and Bergheim, ranging in depth from 800 to 1,000 metres, and yielding between them from 350 to 400 tons of crude oil per month.

At Pasieczna, the Nederlandsche Maatschappij are getting from their 22 boreholes 80 tons per month. A nominal production is obtained by Mr. L. Griffel from four wells, Mr. L. Gorgou from two wells, and Mr. Reinolt likewise from two wells. At Starunia boring is about to be started by Messrs. Compes and Co., of Dusseldorf.

The total output of all the above fields can be put down at from 1,000 to 1,100 tons per month. The crude oil is treated chiefly at the neighbouring refineries at Peczenizyn, Kolomyja, Nadworna, etc.

BATOUM EXPORT TRADE IN NOVEMBER.

The total quantity of petroleum products exported from Batoum during November was 3,540,000 poods. This included 2,701,000 poods of kerosene, of which 1,936,000 poods were in bulk and 765,000 poods in cases. In November, considerable quantities of case oil were sold at very good prices. The following are the figures of the arrivals and shipments of petroleum products in November and stocks on December 1st (in poods):—

	Arrivals.	Shipments.	Stocks on Dec. 1st.
Refined kerosene ..	3,756,000	2,701,000	3,779,000
Solar oil	56,000	—	346,000
Kerosene distillate ..	—	—	23,006
Machine oil	38,000	621,000	628,000
Spindle oil	125,000	66,000	89,000
Cylinder oil	9,000	13,000	19,000
Vaseline oil	—	—	167,000
Lub. oil distillate ..	12,000	—	39,000
Residuals	110,000	139,000	221,000
Total ..	4,906,000	3,540,000	5,311,000

As a result of the increased deliveries from Baku, the stocks had during the month increased by 1,800,000 poods, or about 50 per cent., which occurred in kerosene and partly in machine oil, in which a good trade was done. Solar oil and kerosene distillate were very quiet, whilst the market in the special lubricating oils was fairly good.

The exports to different countries was distributed rather unevenly, namely to England, 746,600 poods; to France, only 357,000 poods; Germany shewed an improvement at 456,000 poods; to Belgium there were shipped 376,000 poods, which is a great falling off against the normal; to other European countries there were shipped only 5,000 poods in barrels; bulk shipments to Alexandria increased to 492,000 poods; to the Far East there was dispatched the first cargo of case oil of 300,000 poods; Turkish and Balkan States took up together 450,000 poods of case oil; Russian home ports took up 358,000 poods.

◆

BAKU PRODUCTION.

The production of crude oil at the Baku oil fields in the first 15 days of December has amounted to 20,748,710 poods.

* * *

THE OPERATIONS OF THE BAKU REFINERIES.

STATISTICS FOR SEPTEMBER, 1906 (in poods).

I.—Manufacture of Illuminating Oils.

Distillation.

	Submitted to Distillation.			Products Received.				
	Crude.	Other Products.	Total	Kerosene.	Residuals.	Other Products.	Loss.	Fuel used.
September ..	26,188,267	255,594	26,443.861	7,607,551	17,112,151	1,065 975	658,184	876,452

Refining

	Submitted to Refining.			Refined Products Obtained.				Chemicals used.	
	Kerosene.	Other Distillates.	Total.	Kerosene.	Other Products.	Total.	Loss in Refining.	Acid.	Soda.
September	7,029,625	9,025	7,038,650	6,865,736	7,734	6,873,110	165,540	23,925	8,511

II.—Manufacture of Lubricating Oils.

Distillates Received.

	Machine Oil.	Spindle Oil.	Cylinder Oil.	Goudron.	Solar Distillates.	Residuals.	Other Distillates.	Loss in Distilling.	Fuel used.
September ..	1,188,298	83,135	51,168	1,192,914	896,347	1,105,353	81,947	184,597	660,205

Refined Products Received.

	Spindle Oil.	Machine Oil.	Cylinder Oil.	Loss in Refining.	Chemicals used.	
					Acid.	Soda.
Sepember	19,005	878,998	26,859	114,645	23,904	2,629

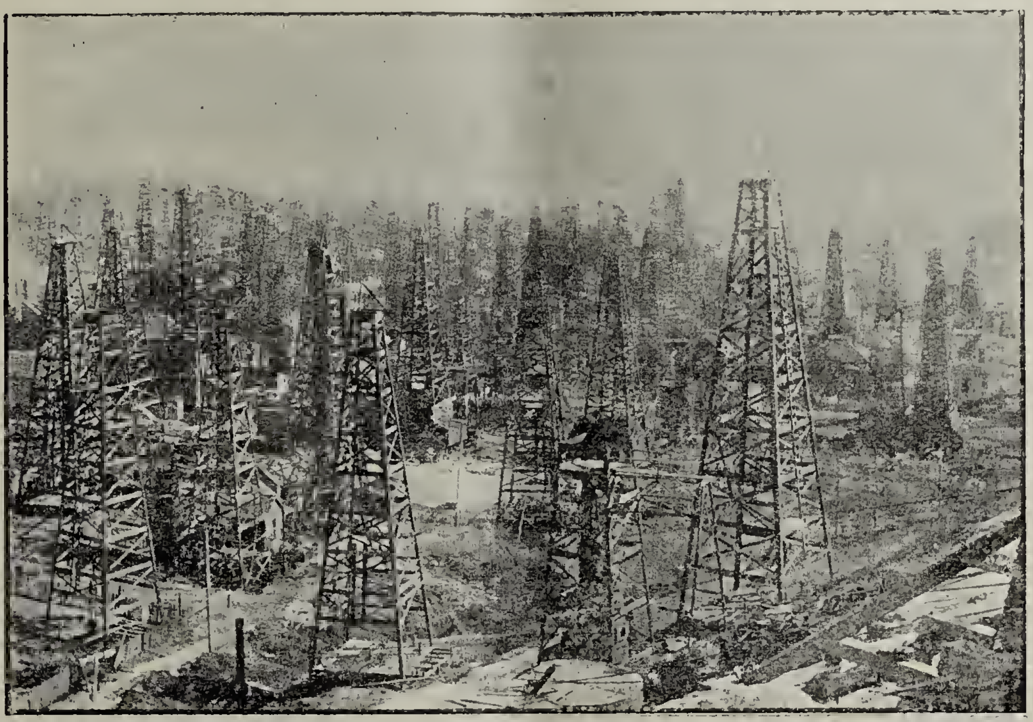
The output of benzine distillates amounted to 427,821 poods. The output of refined benzine was 25,775 poods.

THE CALIFORNIAN FIELDS DURING 1906.

AN INTERESTING PAGE OF HISTORY.

Few of the world's petroleum fields furnish a more interesting page of history than the doings in the California fields during 1906, and this for the simple reason that though considerable activity has been displayed in all the fields, a marked decline has taken place in the production of the wells, the total output for the year being placed at about 28,000,000 barrels, or approximately 7,000,000 barrels less than in 1905.

This decline is not brought about by the giving out of either wells or territory, but was the direct result of an organised effort to curtail production until it could command a price which would be an incentive to profitable development. But while the production has declined in a marked degree, the consumption has increased at a still greater ratio, and the censequence is that the stocks are being drawn upon to an extent which threatens their early exhaustion. It is evident therefore, that higher prices will be the rule, and many producers are confidently looking forward for their oil commanding a price near 50 cents per barrel during the present year.



Coalinga.—The Coalinga field declined in its production to the extent of about 2,000,000 barrels during the year. Rather than their that oil should be sold at practically the price of getting it, the producers shut down many wells early in the year. In other directions, however, efforts were made to bring in new production, but eventually the decline manifest it itself, and there was a stiffening in the prices. At the present time, there are about 200 wells which are producing in the field, and about one-third of that number are shut down until the outlook is more promising. Then about 26 wells are being drilled, so that in the Coalinga field altogether, there are about 300 wells. One very notable event during the past year has been the developing of territory believed hitherto to be barren. This land has proved itself to be most prolific in oil production, and everthing points to a great increase in output as soon as prices are favourable.

The Kern River Field.—In this, the greatest of California's oil producing States, the most important event which marked the past year was the closing of the Associated-Independent contract which called for the entire production of the wells of the Independent Oil Producers' Agency, together with 1,000.000 barrels of oil which was in storage. The fight for better prices in the field had a signal success in the signing of the agreement, for the price fixed was almost one-third better than that ruling for contracts made during 1904. The present production of the Kern River field wells may be taken at about 34,500 barrels daily, and this quantity is generally believed to be the maximum. The fact that the Kern field has been the happy hunting ground for operators in the past is to be found in the depths of the wells which are far less than those in the other fields. Wells of 1,000 feet in depth in the Kern field are considered to be very deep, while in the Coalinga field, for instance, some of the wells are not far short of 3,000 feet in depth.

In Santa Maria Field.—Matters in the Santa Maria field have been fairly satisfactory during the past year. When drilling commenced here, wells were drilled to a depth of about 1,700 feet, but the production from this horizon was not great. Deeper boring was resorted to, and wells were put down up to 3,200 feet deep, from which horizon most prolific wells have been procured.

In this field too there has been a keen fight against the prevailing low prices, and at the present moment the market is strengthening consequent upon the action of many producers in shutting down their wells. In this field, the Union Oil Co. of California is the largest independent producer, and though production has been curtailed in the past through lack of available markets, the completion of the Panama pipe line through which the company will pipe Santa Maria oil for the Atlantic ports and also the European markets, being the commencement of a new era of prosperous activity. The Gracioso Oil Co. too is pushing forward its plans with considerable energy. Thanks to the influx of English capital in the shape of the Californian Refineries, Ltd., much progress has been made in order that the Graciosa Co. might be free of other concerns in the field, and to-day it has a pipe line company, a refinery company, with a refinery which is nearing completion, and tank steamers to ship its production to convenient points for marketing the same.

Of the other fields in California little need be said, excepting that, given remunerative prices, there will be a greatly increased production. Everyone interested in the Californian industry is anxiously awaiting the prosperous times which this year has in store for them.

LONDON PETROLEUM IMPORTS DURING 1906.

The petroleum import trade of London can be said to have been very satisfactory during 1906, if for no other reason than that a record was established in several of the products imported. As our readers will be aware, the United Kingdom last year imported 292,000,000 gallons of petroleum products, and of this quantity 139,075,759 gallons were inported into the port of London, the percentage being about the same as that for the previous few years. In some of the various products, however, London was well to the front especially in benzine, for four-fifths of the total quantities imported into the United Kingdom came into the port of London. Two-thirds of the total quantity of gas oil imported was landed at London during last year, but in regards to illuminating and lubricating oil, the quantities were proportionately less than for 1905. In regard to fuel oil, practically the whole quantities received into this country were accredited to London, though presumably the bulk went into the Government storages on the south coast. The following table shews the quantities of the various products received into the port of London each month during last year, the figures being given in gallons. On account of space we have curtailed the table somewhat, having omitted giving the imports month by month of liquid fuel (10,792,630 gallons), residuals (707,922 gallons) and various other products (426,197 gallons):—

	Illuminating.	Lubricating.	Benzine.	Gas.
Jannary ..	8,342,250	926,750	1,596,830	3,682,771
February	1,654,200	1,181,326	—	3,296,570
March ..	1,213,560	3,840,360	2,800,510	2,189,990
April ..	5,729,320	565,330	950,680	3,673,480
May ..	3,391,320	587,945	1,600,700	1,388,630
June ..	2,327,355	595,215	1,274,040	2,644,250
July ..	8,640,240	1,365,620	1,790,570	890,200
August ..	7,345,770	1,481,575	1,429,256	4,965,770
September	4,085,080	897,303	2,850,053	1,052,000
October ..	7,918,355	1,129,592	2,225,030	1,224,530
November	3,335,900	3,894,510	2,957,920	4,180,700
December	1,895,650	576,740	1,034,760	4,528,500
Totals	55,879.000	17,042,266	20,510,349	33,717,395

THE NEDERLANDSCHE INDUSTRIE EN HANDEL MAATSCHAPPIJ.

DETAILS OF OPERATIONS IN BORNEO DURING 1906.

We have been favoured with statistical data by the London office of the Nederlandsche Industrie en Handel Maatschappij concerning the operations of the company in the oil fields of Borneo during 1906. Our readers will recollect that we have been able to publish the details of the company's operations at the end of each quarter of the past year, and so that comparision may now be made between one quarter and another, we give below the various details of production and the intake and output of the refineries for each thirteen weeks of the year. These figures were as under:—

	First Quarter. In tons.	Second Quarter. In tons.	Third Quarter. In tons.	Last Quarter. In tons.
Production—				
Crude Oil	115,290	92,380	75,770	70,090
Crude Oil Sold ..	—	—	8,405	—
Intake of Refinaries, Crude Oil.. ..	79,548	76,757	97,148	87,919
Output of Refineries—				
Kerosene	28,099	23,332	33.366	26,836
Other Products ..	42,732	42,771	54,223	53,706
Shipments—				
Kerosene	23,333	38,502	30,747	31,136
Other Products ..	34,649	34,140	53,384	47,499

For the purposes of comparison, we herewith give the total figures for the year alongside those for 1905. They are as under:—

	1906.	1905.
Production of Crude Oil	353,430	421,695
Intake of Refineries	335,172	347,635
Output of Refineries—		
Kerosene	111,633	145.739
Other Products	193,372	166,061
Shipments—		
Kerosene	123,718	123,714
Other Products	169,666	151,842
	Dec. 31st, 1906.	Dec. 31st, 1905.
Crude Oil in Stock above ground ..	12,370	46,649
Stocks awaiting Shipment—		
Kerosene	19,040	31,237
Other Products	26,800	24,652
Total Stocks of Crude and Products	58,210	102,538

DETAILS OF BAKU PRODUCTION AND BORING IN OCTOBER, 1906.

The latest issue of the *Neftiannoie Dielo* contains the following details of the production of crude oil at the Baku oil fields in October:—

	Number of Wells in Exploitation.	Production (in poods).				Average per Well per Day.
		By Baling.	By Spouters.	Casual.	Total.	
Balakhany	647	6,449,340	—	2,300	6,451,640	327
Saboontchi	590	15,118,247	10,000	309,920	15,438,167	868
Ramany	188	8,262,546	845,000	35,565	9,143,111	1,639
Bebe-Aibat	193	12,856,462	1,000	—	12,857,462	2,258
Total in October, 1906	1,618	42,686,595	856,000	347,785	43,890,380	900
Total in September, 1906	1,598	39,408,824	126,000	337,133	39,872,557	869
Total in October, 1905	839	18,244,271	—	172,801	18,417,072	1,597

In addition to the above, twelve boreholes at Binigadi produced 26,521 poods.

The production by spouting was obtained from the following wells:—Nos. 284 and 191 of the Mantascheff Co., at Ramany, yielded 350,000 and 150,000 poods respectively; No. 400 of Nobel Bros., at Ramany, 345,000 poods; No. 52 of the Neft Co., at Saboontchi, 10,000 poods; No. 27 of the Caspian and Black Society, at Bebe-Aibat, 1,000 poods.

The stocks of crude oil at the oil fields on November 1st (o.s.) amounted to 6,637,002 poods, against 6,250,589 poods on 1st October, 1906, and 3,053,183 poods on 1st November, 1905.

The amount of drilling done in November was:—in 352 new wells 36,728 feet, and in 87 old wells being deepened 3,812 feet; in all, 40,540 feet. The number of wells started drilling in November was 24, and that of wells which began to be deepened 14.

RUSSIAN .. AND ROUMANIAN .. NOTES.

Resignation—Mr. W. M. Page has resigned his post as managing director of the Romano-American Co., and in his place Mr. Nelson K. Moody has been appointed, who will act jointly with Mr. A. P. Chamberlain.

Varying Successes at Baicoi.—At Baicoi the Trajan Co. are on the point of striking oil in their borehole. On the other hand, Messrs. Van Sikle and Co. have in the same locality brought their borehole down to 380 metres without any satisfactory results.

The Raky Boring Company.—The newly formed Roumanian Raky Boring Co. is about to drill several wells at Poiana in the Prahova valley. The company is also to undertake at its own cost to drill some wells on the property of the Trajan Co., at Campina-Poiana.

To Reduce the Roumanian Petroleum Tax.—Mr. Tache Ionescu, the Roumanian Minister of Finance, has announced in the Roumanian Senate his intention to reduce the tax on petroleum. The step is expected to bring about an increased consumption of petroleum in Roumania.

Sales on Commission.—During the present season Nobel Bros. have had the following quantities of kerosene of other firms for sale on commission in Russia. From the Russian Petroleum and Liquid Fuel Co., Ltd., 6,000,000 poods; Schibaieff Co., 6,500,000 poods; Lianozoff, 2,100,000 poods; Caspian Society, 1,500,000 poods; Mantascheff, 1,000,000 poods.

The Regatul Roman Co.—The productions of the Regatul Roman Co. has now gone up to 600-650 tons per day, this company having now taken up the second place after the Steaua Romana, which in its turn has also increased its output. The Regatul Roman Co. has sold all its crude oil production to the Steaua Romana and Aurora companies.

Roumanian Prices on the Down Grade.—Owing to the continued increase in the Roumanian crude oil production and to the fact that most of the refineries have already provided themselves with all the crude oil they require, a slackening of prices may set in at any moment. For the present only small quantities change hands at prices varying between 40 and 41½ francs per ton.

Significant Rumours.—The *Moniteur du Petrole Roumain* publishes a report current in Roumania, that the Steaua Romana intends to form a separate company to take over its refining business. This is considered as an outcome of the recent combinations on the European oil markets. Other changes in the organisation of the business of the Steaua Romana are also said to be contemplated.

The Coming Congress.—The Roumanian Government delegates for the forthcoming Petroleum Congress have already made up the list of persons and institutions to be invited to take part in the congress. As soon as the invitations have been sent out, and the necessary funds collected, a central committee will be formed which will include all people of importance connected with the Roumanian petroleum industry.

Batoum Shipments.—The shipments of petroleum products from Batoum during the week ended December 23rd (o.s.) were as under:—

	Illuminating Oil.		Other Products.	
	1905.	1906.	1905.	1906.
To Europe ..	181,000	452,000	—	179,000
To the East ..	8,000	184,000	—	1,000
To Russian Ports	1,000	210,000	7,000	2,000
From Jan. 1st to Dec. 23rd:—				
To Europe ..	19,783,000	11,782,000	8,248,000	8,721,000
To the East ..	9,309,000	8,116,000	367,000	61,000
To Russian Ports	2,463,000	3,324,000	233,000	254,000

Welcome News.—According to reports from Batoum, the case factory of the Mantascheff Co. is working at a forced rate, with the object of getting ready another large cargo of case oil for the Far East.

Fire.—Well No. 6 of the Steaua Romana has again been the scene of an outbreak of fire, which spread to four adjoining derricks of the Regatul Roman Co. Fortunately there was no loss of life, only two workmen of the Steaua Romana being slightly injured.

Roumanian Crude Oil Prices.—The price of crude oil in Roumania remains stationary, at about 42 francs per ton. Negotiations are commencing for the sale of the crude oil production in 1908. The production in 1907 is practically all sold up already.

German and English Capitalists Combine.—According to a report from Berlin, a company is now being formed there under the title of New Roumanian Petroleum Co. and consisting of German and English capitalists. The promoters have secured a large tract of petroliferous land at Valeni in the district of Prahova.

Sold by Auction.—The following quantities of petroleum products were sold by the Vladicaucesian Railway by auction:—100,000 poods, benzine; 600,000 poods, distillate; 800,000 poods, kerosene. The oils were secured by the Grosny-Moscow Co. at the followink prices:—Benzine, 1·25 roubles per pood; distillate 47 copecs; ligroin, 20 copecs; kerosene, 20 copecs.

Another Good Roumanian Oil Strike.—Well No. 3 belonging to Mr. Amedée Lazarescu at Glodeni, in the Dambovitza district, has struck oil at a depth of 220 metres, and at the beginning yielded three tons of crude oil per day. It is expected that when the borehole has been cleared of sand the yield will be considerably increased.

Roumanian Refinery Statistics.—The output of the Roumanian refineries in November was:—Benzine, 9,712 tons,; Illuminating oil, 17,361 tons,; lubricating oils, 4,360 tons,; residuals, 25,807 tons,; total 52,241 tons. The quantities issued from the refineries for home consumption were:—Benzine, 77 tons,; illumining oil, 5,010 tons,; lubricating oil, 328 tons,; residuals, 26,304 tons,; total 31,719 tons.

Fuel Prices too High.—On December 19th (o.s.) tenders were received by the Syzrau-Viasma Railway for the supply of 4,000,000 poods of liquid fuel. No contracts were, however, given out, as the prices tendered were considered too high, working out at 35 copecs per pood delivered at Batraki on the Volga. This railway is said to have adopted for their goods trains coal instead of oil fuel, and on certain sections will use coal exclusively.

Saratoff Stocks.—The total stocks of petroleum products at Saratoff on the 1/14th November amounted to 9,619,983 poods, of which kerosene was 4,419,163 poods, residuals 4,696,946 poods, and other products 503,874 poods, these figures shew a decline against last year in kerosene by 2,000,000 poods, and in residuals by 3,000,000 poods. The largest stocks this year are held by the Eastern Transport Co. 3,715,000 poods, Mazout Co. 2,400,000 poods, and Nobel Bros. 1,800,000 poods.

The Arnheemsche Company's Balance Sheet.—The Arnheemsche Petroleum Maatschappij, a Dutch company operating in Roumania, has just published its balance sheet for the financial year ended 12th July, 1906. During the year the company realised by the sale of crude oil 360,149 francs; the cost of production was 187,794 francs; leaving a gross profit of 172,846 francs, which was taken up by drilling expenses, salaries, depreciation, interest, etc. The crude oil production during the past financial year amounted to 15,581 tons, against 17,957 tons in 1904-5, and 7,228 tons in 1903-4. The number of producing boreholes increased from 6 in July, 1905, to 10 in June, 1906.

LATEST QUOTATIONS OF PETROLEUM SHARES.

ENGLISH COMPANIES.

This list is restricted to companies who have paid dividends or who are producers.

Company	Capital Paid Up.	Value of Shares.	Latest Prices.
Assam Oil	£205,000	£1	$\frac{5}{8}$-$\frac{3}{4}$
Baku Russian Petroleum ..	£750,000 Ord.	£1	2/9-3/3
,, ,, ..	£650,000 $5\frac{1}{2}$% Pref.	£1	4/9-5/3
Bibi-Eybat Petroleum Co. ..			8/9-/10
Californian Oilfields	£250,000 Ord.	£1	5-$5\frac{1}{4}$ex.r.
Commonwealth Oil Co. Pref	10/- paid up		$\frac{3}{4}$-$\frac{7}{8}$ pm.
,, ,, Def..	£1 fully paid		$2\frac{15}{16}$-$3\frac{1}{16}$
European Petroleum.. ..	£550,000 Pref.	£1	2/0-3/0
,, ,, ...	£550,000 Ord.	£1	0/6-1/6
,, ,, ...	£376,000 Deb.	£100	80-83
Russian Pet. & Liquid Fuel ..	£500,000 $6\frac{1}{2}$% Pref.	£1	10/9-11/3
,, ,, ...	£600,000 Ord.	£1	9/6 10/6
Schibaieff Petroleum ..	£575,000 6% Pref.	£5	$2\frac{1}{4}$-$2\frac{1}{2}$
,, ,, ...	£575,000 Ord.	£1	6/6-7/6
Shell Transport & Trading ..	£2,000,000	£1	30/0-31/0
,, ,, ,, ..	£1,000,000 Pref.	£10	$9\frac{5}{8}$-$9\frac{7}{8}$
Spies Petroleum Company ..	£312,500	10s.	11/0-12/0

RUSSIAN COMPANIES.

Company	Nom. Value in Roubles.	Quotations on January 13th.	
		Lowest Roubles.	Highest Roubles.
Baku Naphtha Co.	100	547	550
Balakhany Naphtha Co.	250	—	—
Caspian Society	1,000	4,500	4,550
Melikoff, A. C.	250	—	—
Mirzoeff Bros.	250	—	—
Naphtha Co. "Kavkas"	250	40	50
Naphtha Trading Co., A. I. Mantacheff & Co.	250	155	157
Neft Co.	250	200	—
Nobel Bros.	5,000	10,150	10,250
,, ,, ...	250	510	515
Rops and Co. V...	250	250	—
Russian Naphtha Co.	250	120	125
Society Mazout	250	—	—
Tumaieff & Co., J. G.	250	—	—
Volga-Caspian Naphtha and Trading Co.	250	—	—
,, ,, ,, (Second Issue)	250	—	—

SCOTCH COMPANIES.

Supplied by Messrs. MACLEAN AND HENDERSON, STIRLING.

Company.	Capital Paid Up.	Value of Share.	Latest Prices.
Broxburn Oil Co., Ltd., Ord. $8\frac{1}{2}$ pd	£199,750	£10	$22\frac{1}{4}$
Do. 6% Cum. Pref. ..	£100,000	£10	$12\frac{7}{16}$
Burmah Oil, Ord.	£1,100,000	£1	59s. 9d.
Do. Pref.	£250 000	£1	25s. 9d.
Dalmeny Oil Co., Ord. (7 paid) ..	£37,800	£8 10s.	£6 16s. 6d.
Do. 5% Pref. ..	£18,900	£7	93s.
Oakbank Oil Co., Ltd., Ord. (fy. pd.)	£45,000	£10	43s.
Do. New (£8 10s. pd.)	£131,750	£10	42s. 6d.
Pumpherston Min. Oil Co., Ld., Ord.	£110,500	17s.	$6\frac{15}{16}$
(17s. paid)			$12\frac{3}{4}$
Do. 6% Cum. Pref.	£100,000	£10	
Tarbrax Oil Co., Ltd. Ord. (£1 pd.)	£38,350	£1	37s. 9d.
Young's Paraffin Co., Ltd., Ord. ..	£452,808	£4	79s.
Do. "B" Deb...	£150,000	£100	180

DUTCH COMPANIES.

Company.	Latest Quotations	Former Quotations	Florins.
Arnhemsche Petroleum Mij. ..	—	—	1,000
Aurora ,, ,, (Deb. 5%)	—	$93\frac{3}{4}$	—
Campina Poiana Mij...	19	—	—
Dordtsche Petroleum Mij. (Pref.) ..	127	$127\frac{7}{8}$	500
,, ,, ,, (Deb. $4\frac{1}{2}$%)	$101\frac{1}{2}$	$101\frac{1}{2}$	1,000
Gaboes ,, ,, ...	—	—	—
Holl. Rumeensche Petroleum Mij...	$35\frac{1}{2}$	$33\frac{1}{2}$	1,000
Int. Rum. Pet. Mij.	$100\frac{1}{2}$	$106\frac{3}{4}$	500
Java Petroleum Mij. (Ord.) ..	—	—	1,000
,, ,, ,, (Pref.) ..	—	—	—
Koninklyke Nederl. Pet. Mij. Shares	705	701	250-1,000
,, ,, Share certificates	$754\frac{1}{2}$	$700\frac{1}{2}$	1,000
Mœara Enim Petroleum Mij. ..	$136\frac{3}{8}$	$133\frac{1}{8}$	100
,, ,, 1-1,000 Oblig. 5	$100\frac{3}{4}$	$101\frac{1}{2}$	250-1,000
"Moesi Ilir" Petroleum Mij. ..	—	43	—
Nederl.-Rumeensche Petroleum Mij.	$15\frac{1}{2}$	$16\frac{5}{16}$	—
Nieuwe Ned. Petroleum Mij. And...	—	—	1,000
Oliebronnen in Hannover Mij. ..	$147\frac{1}{2}$	$149\frac{3}{4}$	—
,, ,, (Deb. 5 %)	—	98	—
Panolan Maatschappij Cert. ..	350	355	—
Perlak Petrol. Mij. (6% cum. pr. A.) ..	$154\frac{7}{8}$	$149\frac{1}{2}$	1,000
,, ,, (Common) ..	$134\frac{1}{2}$	127	—
Sumatra-Palembang Petroleum Mij	$76\frac{1}{8}$	$75\frac{3}{4}$	50
Zuid Perlak Petrol. Mij. (Pref.) ..	$129\frac{3}{8}$	$129\frac{3}{8}$	—

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Saturday, January 19th, 1907.

THE FRANCO-GERMAN ALLIANCE.

THE world has followed with the greatest interest the various "entente cordiale" which have taken place during the past few years. We have the union between France and Russia, the Franco-Italian entente, and the alliance between this country and our neighbours across the Channel, but while these movements to promote more friendly feelings between great nations have been pushed forward to success, the remarkable fact is that in the past all efforts to bring about a similar feeling between France and Germany have been futile. We have it placed on record that a well-known politician has declared that "trade follows the flag," but in the last-mentioned case at all events, we have reason to believe that the contention will have to be reversed, for recent events suggest that the flag will follow the trade.

In another place in our present issue we refer to the "entente cordiale" which has just been concluded between two of the leading banking house in Europe—the French house of the Rothschilds, and the Deutsche Bank of Berlin; and, although, for the time being, this is limited to the petroleum branch of commerce, there is no doubt that it may be the forerunner to wider and even more important commercial relations between those two countries.

It is about a year since Dr. Dvorkovitz obtained from the Russian Emperor a message of peace to the European nations, in which His Majesty confirmed his unchangeable sympathy for the principles which formed the basis of the first Hague Conference, and we are sure our readers will be pleased to find that the recent Franco-German alliance has within its scope possibilities which will undoubtedly have very far-reaching results.

Whether it be a coincidence or not we are not prepared to say, but it certainly is very significant to find that the appearance of the Deutsche Bank in the petroleum industry, more especially in the Roumanian fields, coincides with precisely the same conditions which prevailed in the Russian fields, when in 1883 the Rothschilds first took a direct and important interest in them. At that time the total production of crude oil at Baku was approximately 750,000 tons per annum – the figure at which the petroleum output of Roumania stands to-day. Mr. Aron and Mr. Baer went to the Caucasus and then purchased the refinery belonging to Mr. Palashkovski, who, by-the-bye, was the builder of the Baku-Batoum line, and those two gentlemen also acquired from him certain installations at Batoum, together with privileges which he possessed as being the contractor for the railway. The great and beneficial effect which the advent of the Rothschilds had in the Russian oil fields is shewn by the fact that in the following year—in 1884—the quantity of crude oil produced was practically doubled, and so by leaps and bounds it continued to increase, until to-day we find the fields in the Caucasus producing as much in one month as Roumania does in one year. Some few years ago we gave in the Review a full description of the activity which characterised the Rothschilds in the Russian fields, and also in fostering that country's petroleum export trade, but for the benefit of our numerous new readers we may return to this question at an early date. For the present, however, it will suffice if we make the general statement that without the enormous capital which the Rothschilds then placed at the disposal of the Baku refiners, a very long period must have elapsed before the Russian industry could have occupied the position to which it so soon rose.

As may perhaps not be known, the Deutsche Bank has, in a way, been forced to occupy the prominent position in connection with the petroleum industry on the Continent, which it now holds. We understand that it had a very large interest in the Hungarian Bank of Commerce and Industry which was the first to secure and establish the Steaua Romana, and like that of many other pioneers, its enterprise was not financially successful, for it lost something like 20,000,000 francs. The Deutsche Bank was a large holder in the shares of the Hungarian Bank, and so they had practically no alternative but to continue to take an active interest in the petroleum industry. Just about this time the Hanoverian fields too were witnessing many developments, and here also the Deutsche Bank displayed an active interest, while now, as we know, they brought the European Petroleum Union—the new Franco-German alliance – into being and of which we will now speak.

As everyone is aware, until a few years ago, the petroleum industry in Europe was represented by only two groups – the American and the Russian producers. Roumania occupied only a very unimportant place in the supplying of the world's oil demands, but with the entrance of the Deutsche Bank into her fields, a third and powerful party came on the scene, with the result that some sort of combination sooner or later was almost inevitable. At least it would be a combination of energy or a long and bitter struggle. For a short period that feeling of antagonism and opposition prevailed, but at length common sense ruled, and arrangements were made, the result of which has been that the Deutsche Bank has joined the Rothschild and Nobel interests for the purpose of opening the European markets (England excepted) to Roumanian oil products.

That combination was formed under the title of the European Petroleum Union, with a capital of 20,000,000 marks (which we learn is about to be greatly increased, and this combination, in its turn—though to the cursory observer it may not appear so—has now brought into being the subsidiary company known as the British Petroleum Co., whose capital is £500,000. In order that it may carry out the designed plan of operating on the English markets, this new British Petroleum Co. has absorbed the General and the Consolidated Petroleum Companies, so it is clear that by the completion of these arrangements a great and lasting impetus will be given to the rapid development of the Roumanian oil fields in which the Deutsche Bank is so largely interested. In this new English Company, the Deutsche Bank will be represented on the directorate by Dr. Hertz, and Messrs. E. Heinemann, Janson and H. M. Mosditchian; Messrs. Jules Aron, M. Baer and F. Lane will be representatives of Messrs Rothschild, while Messrs. Nobel's interests will be watched by Messrs. R. Kean and H. Olsen, the remaining director—Sir Fitzgerald Law—being, we have reason to believe, as his name suggests, the impartial arbitrator who will see fair play all round.

Although the Franco-German alliance is greatly in favour of Roumania, we do not for a moment think that the Russian petroleum export trade will suffer by it, for, so far as we understand, Messrs. Nobel and Rothschild have not in any way relinquished their rights to bring into this country certain quantities of Russian illuminating oils, but in any case the Russian industry is well represented on the English market by the Homelight Oil Co., who confine all their energies to the distribution of the Russian product in this country.

In conclusion, we would mention that in closely studying this question one or two remarkable facts present themselves. The general nature of the Russian and Roumanian oils is closely allied, the two nationalities are strikingly similar, in their character and also is their religion, while the development of both sets of oil fields is due to the keen interest which financial houses have taken in them. In regard to this latter point, we believe there is no other industry which has secured the active co-operation of two such prominent financial firms as the Rothschilds and the Deutsche bank, and though the latter house is not so old in petroleum enterprises as the Rothschilds, we trust that it may emulate the example set long ago, and plod along systematically and continuously, even when the future looks dark, being certain that ultimately its energies will reap their reward in the shape of financial success.

LONDON OIL SHARE MARKET.

Friday, January 18th.

Business in connection with the Oil Share Group on the London Stock Exchange has not been sufficient to cause much alteration in the price of the various issues ; but it is hoped that yesterday's reduction in the Bank Rate to 5 per cent. will give an impetus to fresh commitments in the general market, which should broaden out into the industrial section.

On Saturday, January 5th, Anglo-Russian stood 0-$\frac{1}{8}$, Assam Oil $\frac{5}{8}$-$\frac{3}{4}$, Bibi-Eybats $\frac{3}{8}$-$\frac{1}{2}$, Debentures 84-89, Baku Ordinary 2s. 3d. to 2s. 9d., Refineries 4s. to 5s., Californian Oilfields 5-5$\frac{1}{2}$, Refineries 1$\frac{3}{16}$-1$\frac{5}{16}$, European Preference $\frac{1}{16}$-$\frac{3}{16}$, Debentures 79-84, Schibaieff Ordinary 7s. to 8s., Preference 2$\frac{1}{4}$-2$\frac{3}{4}$, Russian Ordinary 10s. to 11s., Preference 11s. to 11s. 6d., Debentures 91 to 94, Shell Transport 28s. 6d. to 29s. 6d., Preference 9$\frac{1}{4}$-9$\frac{3}{4}$, and Spies $\frac{7}{16}$-$\frac{1}{2}$.

Subsequent alterations consist of a decline of $\frac{1}{4}$ in Californian Refineries on the following Tuesday, and a fall of 6d. per share on Thursday in Russian Ordinary, with a further improvement in Spies on Friday to $\frac{9}{16}$-$\frac{5}{8}$, a $\frac{1}{4}$ advance on Saturday 9$\frac{1}{2}$-10 in "Shell" Transport Preference and 1s. 6d. in the Ordinary on Monday last, while Californian Oilfields recovered to 5-5$\frac{1}{2}$ on Tuesday.

At the first carry over for the year which took place on the 14th inst., Contango Rates ruled very high, even 9 per cent to 10 per cent. being exacted to continue shares to the end of the month.

A comparison of "making up" figures shew about equal alterations, Baku Ordinary rising 6d. at 2s. 6d. Preference 3d. at 4s. 3d., Californian Oilfields $\frac{1}{8}$ at 4$\frac{7}{8}$, Spies 3s. at 12s., and Shell Transport Ordinary 6d. at 30s. 6d.

On the other hand Schibaieff Ordinary at 7s. 3d. fell 3d., Russian Ordinary and Preference both declined 6d. at 10s. 6d. and 11s. respectively, while Anglo-Russians at 1s. and Schibaieff Preference at 2$\frac{1}{2}$ mark no change.

To-day's quotations are given on page 44.]

Another Californian Pipe Line.—Advices from Bakersfield state that the producers in the Midway oil field are bent upon laying a pipe line to Port Harford which is 75 miles distant. They are to carry out this work in order that their product may find a wider market than it hitherto has found.

A TYPICAL KANSAS WELL LET LOOSE.

Scenes like the one here depicted are by no means uncommon in the natural gas fields of America, the particular one in this case being a gas well in Kansas which suddenly broke loose. It belongs to the New York Oil and Gas Co., and is said to have a producing capacity of one million cubic feet per hour. The operators experienced the greatest trouble in capping the well so that the gas might be preserved, and so interesting were the experiments in the direction of getting the

well under control that the matter formed the subject of a paper which was recently read before the members of the American Gas Institute at their annual meeting.

The King of Tulsa.—It is stated that Professor Galbreath is recognised as the oil king of Tulsa. He controls two-thirds of the entire output of the famous Glenn pool, and it is now announced that a company in which English capital will play a part is being formed with a capital of $20,000,000 to build an independent pipe line to Port Arthur. Storage for 3,000,000 barrels is to be shortly erected by the oil king of Tulsa.

Boom in the Glenn Pool.—The now well-known Glenn pool in the Mid-Continental fields is passing through a boom period, such as was only enjoyed by a few of America's greatest fields. During the past seven weeks over a dozen new oil operating companies have been formed to work in this territory, and every available tract is now being picked up at ever increasing prices

The Petroleums of North America.

Being a Comprehensive Account of the Constituents of American Petroleum. . . . .

By Mr. CLIFFORD RICHARDSON.

(Continued from page 26.)

An examination of the residue by the writer, according to the method which has been previously described resulted as follows :—

CORSICANA RESIDUUM.

Physical Properties.

Specific gravity, 25/25°	·9473
Flash	204°

Chemical Characteristics.

Loss, 160°, 7 hours	2·6%
Character of residue	Soft.
Loss, 200°, 7 hours (fresh sample)	7·0%
Character of residue	Soft.
Bitumen insoluble in 88° naphtha, air temperature —Pitch	6·9%
Per cent of soluble bitumen removed by H_2SO_4	16·8
Per cent. of solid paraffins	4·8%
Residue left after heating at 200° for 12 days	72·6%
21 days	72·6%
Penetration of residue at 25°	45

The residuum contains decidedly less paraffin scale than Eastern, Colorado, or even Kansas oils, but contains about the same amount of stable hydrocarbons unattacked by acid.

The Sour Lake field produces a much denser oil ·9722 to ·9211, 14·0 degrees B. A sample of gravity ·9459, 18 degrees, B., obtained in 1900, has been examined by the writer with the following results :—

Sour Lake Oil.

Specific gravity, 20/20°. .9458 (Contains water).

	Per cent.
Beaume	18.0
Volatile, 100°	22.8
Character of distillate. Water with trace of oil.	
Volatile, 160°, 7 hours (dry oil)	12.6
Volatile, 200°, 5 hours	14.4
Total	49 8

Residue after heating to 160 degrees, flows readily at 21 degrees, asphaltic, pulls to a long string. After heating to 200 degrees residue flows quickly at 25 degrees.

Result of Distillation of Original Oil at 25 mm. Pressure after Removing Water.

Fraction.	Per cent. Distilled.	Colour.	Sp. Gr. 20°	Refrac. Index
Crude oil.	—	Reddish-brown, green fluorescence	—	—
100–150°	6·6	Light yellow	·8693	1·474
150–170	12·7	Light green-yellow	·8957	1.489
170–175*	2·6	Light green-yellow	·9056	1·500
Residue	78·1	Reddish-brown maltha, very sticky.	—	—

* Cracking begins.

The fractions shewed no paraffin at zero. The residue appears free from paraffin and is strongly asphaltic.

Result of Treatment with Reagents.

Fractions.	Colour.	Loss with NaOH	Loss with H_2SO_4.	Sp. Gr. 20°	Refrac. Index
100–150°	Colourless	3·0%	1·5%	·8623	1·475
150–170	Colourless	1·7	3·2	·8879	1·490
170-175	Colourless	5·0	10·0	·8960	1·495
Residue	Light reddish brown.	—	18·2	·9432	1·521

In an open dish 35 per cent. of this oil was volatile in seven hours at 200 degrees, leaving a soft asphaltic residue, but on distillation under a pressure of 25 mm. only 21 per cent. was volatised before cracking began. No paraffin could be separated from the distillates, and those boiling between 100 and 150 degrees at 25 mm. had the following ultimate composition :—

	Per Cent.
Carbon	85·9
Hydrogen	14·0

This is a much larger percentage of hydrogen than is present in the asphaltic oils of California. A comparison of the distillates from the Corsicana, Sour Lake and California oils is of interest :—

Specific Gravity.
Distillate at 25 mm.

	Corsicana. Before treatment.	Corsicana. After treatment.	Sour Lake. Before treatment.	Sour Lake. After treatment.	California. Fullerton. Before treatment.	California. Fullerton. After treatment.
50–100°	·7611	·7337	—	—	·8745	·8169
100-150	·7932	·7853	8·693	·8623	·9195	·8593
150-175	·8187	·8132	·9056	·8960	·9517	·8774

The hydrocarbons of the same boiling point in California oil are of an enormously higher density than either of the Texas distillates, thus differentiating them very sharply, while this is emphasised by the character of the residuum of the different oils, that from California being much less stable than the Texas residuum.

Per Cent. of Residuum in Naphtha Solution Removed by Strong H_2SO_4.

	Per Cent.
Fullerton, 1899	33·8
Summerland, 1894	25·8
Sour Lake, 1899	18·2
Corsicana, 1899	15·8
Ohio, 1897	13·6
Pennsylvania, 1897	10·5

Since 1900 the Sour Lake wells have been sunk to a greater depth and a much lighter oil obtained than that examined by the writer. The character of the petroleum from this field may, to-day, be of somewhat different nature.

A petroleum which has attracted a great deal of attention is that from the celebrated Beaumont field, or Spindle Top pool, in Jefferson county. This has been examined by many chemists and in some detail by the writer. His results are as follows, in comparison with those for Pennsylvania petroleum : —

Ultimate Composition.

	Beaumont, Texas. Per cent.	Pennsylvania.* Per cent.
Carbon	85·03	86·10
Hydrogen	12·30	13·90
Sulphur	1·75	·06
Oxygen and nitrogen	·92	—
Loss on treatment with excess of H_2SO_4	39·0	21·0

* Engler.

Physical Properties.

	Beaumont.		Pennsylvania.
Specific gravity 25/25°	9·12	9·14	·8014
Flash	Ord. temp.	43°	Ord. temp.
Viscosity	—	75°	37°

Volatility in Open Dish.

	Per cent.	Per cent.	Per cent.
110°, 7 hours	19·19	20 0	47·3
160°, 7 hours	21·21	27·0	58·0
205°, 7 hours	57·57	49·0	68·0
To constant weight :—			
105°, 42 hours	48·0	48·0	58·7
160°, 70 hours	64·0*	57·0	71 8†
265°, 49 hours	74·0	74·0	·84·0

* 49 hours † 42 hours.

Viscosity of Residues.

205°, 7 hours	Quick flow.	Quick flow.	Soft.
205°, 49 hours	Solid.	Solid.	Brittle pitch.
Penetration	10	8	

Distillation—Engler's Flasks.

	Beaumont.	Pennsylvania.
Distillation begins	110°	80°
Below 150°	2·5%	21·0%
150–300	40·0	41·0
300–350	20·0	14·0
350–400	25·0	23·0
Loss on acid treatment (150–300 fraction)	10·0	1·8
250–260	30·0	—
Loss on acid treatment	8·0	—
Percentage of acid used	7·0	2·5

Specific Gravity and Refractive Index.

	Beaumont.		Pennsylvania.	
Below 150°	Amount too small.		·7188	1·415
150–300	·8749	1·473	·7984	1·437
300–350	·9084	1 501	·8338	1·462
350–400	·9182	1·508	Paraffin	1·470

(To be continued.)

THE BAKU PETROLEUM ASSOCIATION.

ANNUAL MEETING.

The twenty-third annual meeting of the members of the Baku Petroleum Association opened on the 10th of December, with Mr. Rugevitch, Chief Government Mining Engineer of the Caucasus, in the chair.

This meeting was the first to be held under the altered voting conditions, which reduce the hitherto overwhelming influence in the big firms in the affairs of the association, and correspondingly increases the power of the medium and small firms. For instance, formerly six of the largest firms held a majority of votes, but under the new regulations it will require a combination of 30 of the largest firms to make up a majority of votes. Under the new arrangement the voting power of the leading firms will be :—Nobel Bros., 24 votes ; Caspian and Black Sea Society, 19, Mantascheff and Co., 19; Caspian Society, 15 ; Schibaieff Co., 15 ; Russian Petroleum and Liquid Fuel Co., Ltd., 12 ; Mirzoeff Bros., 10 ; Nabatoff Bros., 10 ; Aramazd Co., 9 ; Assadulaeff, 9 ; Baku Naphtha Co., 8 ; Pitoeff, 8 ; and Neft Co., 8 votes.

Fuel Economy at the Oil Fields.

The most important question discussed on the first day was that of economising fuel at the oil fields, brought forward by the Technical Committee. About 10 per cent. of the crude produced is now used as fuel at the oil fields, of which 6,500,000 poods is Government oil. The percentage is admittedly excessive, and Mr. Rugevitch attributed it to the imperfect construction of the burners ; he thought that 15 per cent. of the fuel could be economised, which would mean a saving to the Government of 200,000 roubles per annum.

The Technical Committee maintained that on the whole the burners were satisfactory, and to change them under present conditions would be both unnecessary and inexpedient. They directed attention, however, to an invention by a Mr. Nagel, which is intended to automatically regulate the admission of air into the furnace, and brings about a more complete combustion. The adoption of the apparatus could yield a saving of 15 per cent. of fuel. It was decided to further investigate the the matter at a more opportune time.

The Question of Transport.

Among the questions discussed on the second day of the meeting was that of transport on the Transcaucasian Railway. The Waggon Allotment Committee foresaw during 1907 a great reduction in the quantities of oils to be sent from Baku to Batoum. They estimated these at no more than 50,000,0000 poods, against the 100,000,000 poods in former years. To keep the railway fully employed they recommended to take steps to develop the deliveries of fuel oil to the home markets *via* Batoum. The railway would welcome such a solution, as the opening of the through pipe line from Baku to Batoum had set free a number of locomotives and tank waggons which could be used for carrying residuals.

The meeting, however, received this proposal without enthusiasm, as the committee did not shew which markets it was intended to serve with fuel *via* Batoum, nor what the cost of delivery would be.

Mr. A. O. Goukassoff even raised the question of abolishing the Waggon Allotment Committee altogether, which has ceased to have any *raison d'etre.* Under present conditions the railway could more than satisfy all requirements, and there was no need for allotting tank waggons.

The meeting agreed in principle with Mr. Gukassoff's suggestion, and decided to call a special meeting of refiners to further consider the question.

The Waggon Allotment Committee, in its report, mentioned the need of increasing the quantity of kerosene which the pipe-line station accepted daily at Baku to 200,000 poods, in view of increased demands from abroad. The railway had agreed to increase it from 155,000 to 175,000 poods.

A committee was appointed to consider and report on this question.

At the sittings on December 16th, 17th, and 20th the report of the auditing committee was considered. The sittings on the 21st and 22nd were devoted to the estimates for 1907. The Council estimated the revenue for 1907 at 2,827,700 roubles, and the expenditure at 3,167,092 roubles, thus foreseeing a deficit of 339,392 roubles, which added to the deficits of former years—in 1905, 792,000 roubles, and in 1906 about 228,000 roubles—brought the total indebtedness of the

CLASSIFIED IMPORTS INTO UNITED KINGDOM UP TO JANUARY 14th, 1907.

IN GALLONS.

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Country.	Illuminating.		Lubricating.		Residuals.		Gas Oil. (Solar)		Benzine.		Fuel Oil.		Other Descriptions.		Totals.	
	Since Dec. 31.	From Jan. 1.	Since Dec. 31.	From Jan. 1.	Since Dec. 31.	From Jan 1.	Since Dec. 31.	From Jan 1.	Since Dec. 31.	From Jan. 1.	Since Dec. 31.	From Jan. 1.	Since Dec. 31.	From Jan. 1.	Since Dec. 31.	From Jan. 1.
Austria ...	—	—	3,740	3,740	—	—	—	—	—	—	—	—	—	—	3,740	3,740
Belgium ...	—	—	20,630	20,630	—	—	—	—	—	—	—	—	—	—	20,630	20,630
Canada ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dutch India.	—	—	—	—	—	—	—	—	2,088,580	2,088,580	—	—	—	—	2,088,580	2,088,580
Germany ...	847,050	847,050	62,510	62,510	—	—	—	—	—	—	—	—	—	—	909,560	909,560
Holland ...	—	—	—	—	—	—	—	—	32,450	32,450	—	—	6,640	6,640	39,090	39,090
Roumania ...	294,430	294,430	—	—	—	—	1,065,900	1,065,900	591,450	591,450	126,700	126,700	—	—	2,078,480	2,078,480
Russia ...	280,000	280,000	782,140	782,140	—	—	—	—	—	—	—	—	—	—	1,062,140	1,062,140
U.S.A. ...	3,156,330	3,156,330	2,200,880	2,200,880	—	—	1,354,420	1,354,420	—	—	—	—	51,960	51,960	6 763,590	6,763,590
Other Countries	—	—	920	920	—	—	—	—	2,500	2,500	—	—	—	—	3,420	3,420
	4,577,810	4,577,810	3,070,820	3,070,820	—	—	2,420,320	2,420,320	2,714,980	2,714,980	126,700	126,700	58,600	58,600	12,969,230	12,969,230

association up to 1,359,570 roubles. To cover the deficits of the first two years, the association obtained a Government loan of 900,000 roubles, and at the present time they had to find means to cover the remaining 459,570 roubles. The levy on petroleum products for the purpose of the common fund had been raised to the highest maximum of one-half copec per pood, and from the present quarter an increase in revenue could only be expected in the event of an increase in the production, which had seriously declined during the last two years, and which was the main cause of the deficits. Formerly, shortages in revenue could be temporarily covered by loans, but now that was refused both by banks and private people. To reduce the expenditure to any appreciable extent was impossible, the bulk of the expenditure going to satisfy the needs of the workmen in the matter of hospitals, schools, etc., and in view of the present spirit among the workmen, it would be risky to try and economise in this direction. Nor was it advisable to cut down the expenditure on the protection and maintenance of order at the oil fields. Therefore there remained only some minor items, which even if done away with altogether, which of course was out of the question, could not make good a deficit of nearly half-a-million roubles.

The meeting discussed the question of extending the levy of the association to firms engaged in business auxiliary to the petroleum industry. The Conference of representatives of such firms, which had been discussing the question with the council of the association, had not come to any decision. It is thought that the reason was the unwillingness of the said firms to contribute toward the funds of the association, and, in view of this, the meeting resolved that if these auxiliary enterprises would not contribute toward the expenses, the association should refuse them the use of its institutions, such as hospitals, schools, etc., or charge them the full cost of the assistance rendered to them.

This step was proposed by Mr. A. O. Goukassoff, who shewed that at a total expenditure by the association of 3,000,000 roubles per annum, the same should work out per workman of the firms forming the association at 150 roubles, whilst the actual expenditure for each workman was only 100 roubles, the other 50 roubles being evidently spent on the men of the auxiliary enterprises.

The estimate of the revenue of the association for 1907 was made up as follows:—Levy on a production of 475,000,000 poods at ½ copec per pood, 2,375,000 roubles; crude oil collected in the drainage canals of the association, 220,000 roubles; sale of drinking water, 177,000 roubles; payment for medical treatment of outside patients, 25,000 roubles; other items, 30,000 roubles; total 2,827,000 roubles.

The expenditure consists of:—Expenses of the council, auditing committee, technical committee, representatives, *Neftiannoie Dielo*, etc., about 170,000 roubles; medical aid and sanitary undertaking, 702,000 roubles; police, 643,000 roubles, technical supervision, roads, lighting and other public works, 370,000 roubles; popular education and popular recreation, 251,000 roubles; water supply, 159,000 roubles; eating houses, baths and charities, 82,000 roubles; expenses of collecting oil, 45,000 roubles; remuneration to long service employes, 65,000 roubles; building of a church, 39,000 roubles; postal institution, 6,000 roubles: interest on loans, 75,000 roubles; sundry items, 18,000 roubles; new buildings, 542,000 roubles; total, 3,167,092 roubles. The population of the oilfields consists of from 40,000 to 50,000 workmen, of which about 20,000 are employed by firms forming part of the association.

NATURAL GAS DEVELOPMENTS IN KENTUCKY.

Considerable capital is now being invested in the development of Kentucky's natural gas resources. The possibilities of the extensive gas belts recently drilled are beginning to be realised and in several sections in Southern, Northern, and Eastern Kentucky companies have lately been organised for the purpose of supplying natural gas to the cities and towns continguous to the developments. A number of large prolific gas producing areas have already been defined, and up to the present time, natural gas has been discovered in over fifty counties in Kentucky. The developments however, have heretofore been merely incidental to the development of crude oil, and until the past year its potentialities have not been realised. It is stated that within a short time towns extending throughout two-thirds of the State will be lighted almost entirely by natural gas.

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AMERICAN NOTES

A Good Canadian Gasser.—It is reported that the owners of the gas well at Valetta, Canada, have recently received an offer of $10,000 to supply Chatham with natural gas by its means.

A Large Canadian Deal.—As shewing the confidence entertained by Canadian operators in the Tilbury oil field, or rather the eastern portion of it, it is reported that the Campbell Oil Co. has sold one of its leases of 100 acres to a syndicate for $55,000 cash.

A New Company for West Virginia.—A number of Pittsburg capitalists have recently organised a company to be known as the Eagle Oil Co. The new concern holds 1,500 acres of oil lands in Crawford county and has a production of 400 barrels per day.

At Jennings.—The production from the Jennings oil field is constantly on the wane, and December registered a further decline. At the commencement of the month, the field was producing about 18,000 barrels daily, but at the close, the total daily yield was but a little over 13,000 barrels.

Refinery Destroyed.—A dispatch from West Virginia states that the plant of the Freedom Oil Co. of Manchester, a suburb of Wheeling has been totally destroyed by fire, the damage running into tens of thousands of dollars. Fortunately the large storage tanks of the Standard Oil Co. close by were saved.

An Important Strike.—An important strike of oil is recorded at Newport, Washington county, Ohio. The well is upon the Pure Oil Co.'s property, and when drilled into the Keener sand the oil spurted over the top of the derrick. The strike is important inasmuch as the territory in the vicinity has not hitherto been tested.

Progress at Boulder.—According to a correspondent of the *Oil, Paint and Drug Reporter* there has lately been a great increase in the number of oil wells near Boulder, Colorado, and now the estimated production is about 400 barrels daily. When stronger pumps are installed, which will shortly be the case, it is believed that the production will increase fifty per cent.

Extensions of Refinery Plant.—The United Oil and Refining Co., whose plant is at Spindle Top, are contemplating making a number of extensions as soon as possible so that an additional 2,000 barrels daily can be treated. It is also intended to erect storage for the refined products at Sabine Pass so that the export trade for refined products may be cultivated.

Well Done Tilbury.—The latest reports from the Tilbury field of Canada are of the most favourable description. One of the newest wells drilled is that owned by a Mr. Tremblay, and is called the Tremblay well. After being brought in, this well flowed for a few hours producing 5,000 barrels before it could be checked. The owner is to drill three or four more wells immediately.

Death of an Oil Pioneer.—The death is announced of Mr. David Kirk, one of the oil pioneers in the American petroleum industry. Mr. Kirk was born in Scotland in 1831, and when quite young, entered the American oil business, living for a number of years in Butler. A photograph of the deceased gentleman, together with a number of interesting details of his career will be found upon another page.

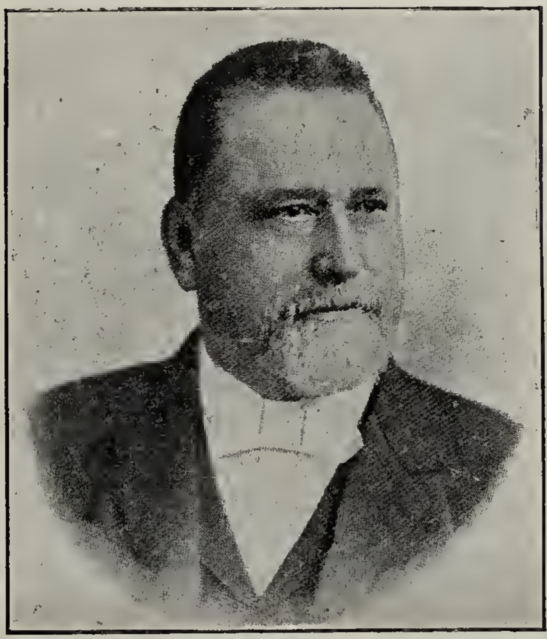
Operations in the Caddo Field.—Though this north-west Louisianan field has not made much progress since its first producing well was brought in, development work is still proceeding, and facilities to handle the oil have been erected, these including a pumping station and a six-inch pipe line. At the end of the year three wells were being drilled, two of these belonging to the Producers' Oil Co. The field is, however, only making about 200 barrels daily.

First Oil Shipment *via* the Panama Pipe Line.—Just before the close of the year, the Union Oil Co. of California sent their first tank steamer from California bound for Panama with about 5,000 tons of petroleum consigned to points along the Atlantic coast. This oil will be piped through the recently completed Isthmus pipe, and forms the first shipment *via* the Panama pipe line. The "Argyll" which tanker is conveying the oil, is one of the large fleet of bulk carrying vessels owned by the Union Oil Co. of California.

DEATH OF AN AMERICAN OIL PIONEER.

One by one the pioneers of the American petroleum industry are passing away, the last to receive the call being Mr. David Kirk, whose name is well known throughout American oil circles. Few men had a larger acquaintance among old time oil men than Mr. Kirk, whose photograph we herewith reproduce. He began almost with the inception of the petroleum industry in America, and continued active and aggressive until a few years ago, when, having amassed a fortune, he disposed of his interests and lived a retired life.

The late Mr. Kirk was born in Scotland in the early thirties his parents removing to Pittsburg when he was very young. He was in his thirtieth year when he drilled his first oil well in Franklin, Venango county, and two years later he established, at Pittsburg, Kirk's oil yard for the pumping, storing, and forwarding of petroleum—the first of its kind in America. He also organised and managed the National Refining and Storing Co., whole refinery was one of the largest in the country. When on a trip through the oil lands to secure a supply of oil for the company's refinery, he visited Pithole, where two large wells had been drilled in, but whose production had be held for three months owing to lack of buyers and transportation facilities. Mr. Kirk bought the entire output of the wells on hand, and agreed that it should be removed within sixty days. He chopped out a road through the woods from the wells to the river, hired teams, and got the oil to market within the stipulated time.



About this time a party of Pittsburg capitalists were constructing a pipe line along Oil Creek, and changed the route so that it would touch Pithole Creek. The undertaking was a great one, and soon the syndicate found itself in financial difficulties. It was here that Mr. Kirk came forward and offered to finish the line and erect the necessary storage, if only the syndicate would allow him to have the management and finish the laying of the line in his own way. Needless to say, the scheme was carried through to a successful issue, but after a time Mr. Kirk resigned the managerial position—a step which he always considered to be his greatest financial mistake.

At one time he was one of the large operators in the Bradford oil field, and in 1877 he organised the McCalmon Oil Co., acting as its president and manager. The company operated extensively and successfully, paying in dividends over $1,000,000. Then Mr. Kirk sold his interests in the Bradford field and devoted his time and energy to operating in the West Virginian fields, from which he amassed considerable wealth. He was one of the organisers of the Pure Oil Co., and one of the largest partners in the company, which for a long time supplied the district of Butler with natural gas.

During the latter portion of his life, Mr. Kirk spent a great deal of his time in travelling both in America and foreign countries.

PETROLEUM DEVELOPMENTS IN THE PROVINCE OF FERGHANA.

A local correspondent in the *Trade and Industry Gazette* supplies the following details relative to the development of the petroleum industry in the Province of Ferghana in Russian Turkestan. He lays special stress upon the established fact of the existence of a large percentage of paraffin in Ferghana crude oil. Notwithstanding the high duty charged on paraffin wax imported into Russia (3 roubles per pood), and the generally high price ruling for it in Russia (about 8 roubles per pood), the quantity of this product consumed in that country annually ranges from 300,000 to 350,000 poods, which is imported chiefly from Scotland. Quite recently, however, the paraffin wax manufactured by Messrs. Nobel Bros. at Baku from crude oil, produced on Tcheleken Island, has been placed on the market in limited quantities. There can be no doubt that the consumption of paraffin scale will grow rapidly. In any case even the present rate of consumption would be sufficient to give employment to two large paraffin wax refineries in Ferghana, or several medium-sized ones; that the manufacture of paraffin wax in Russia would be a very profitable business is clear from the fact that the manufacturer would have the benefit of the difference between the import duty, 3 roubles, and the excise duty, 30 copecs, *i e.*, 2·70 roubles per pood. The manufacture of paraffin wax from petroleum is much cheaper than from shale, as is done in Scotland. The difference in cost may be taken at 1 rouble per pood, which brings the total margin of profit up to 3·70 roubles.

It may be said that the lasting nature of the Ferghana petroleum industry has not yet been established. It must be borne in mind that, according to official statistics, the average productive life of wells at Baku must be taken at no more than five years, and during this period the output decreases very considerably. In the Tchimion field in Ferghana there are wells which have been producing for two years, or nearly half of the average productive period of Baku wells, and during this period the productivity of these wells has decreased only by about 25 per cent. It is doubtful whether at Baku many wells will be found with a smaller rate of decline in yield. At present, in the third year of their existence, the Tchimion field is supplying from five boreholes from 11,000 to 12,000 poods per 24 hours, exclusive of the quantity used at the wells for fuel and other purposes. It may also be mentioned that some shales were up to 84 feet deep and 8-inch diameter. On the concessions held by Messrs. Petroff, at Kamysh-Bashi, oil was produced during a period of 10 years, and one well is still producing now at an undiminished rate.

In conclusion, the writer touches upon the question of possible competition between Baku and Ferghana oils. For many reasons such competition can never become serious. The Ferghana oil field is situated at such a great distance from the principal commercial and industrial centres that, generally speaking, its sphere of influence would be confined within the limits of Russian and Chinese Turkestan, Northern Afghanistan and North-east Persia. These would constitute the market for Ferghana kerosene and residuals. At the present time the demand for the above-mentioned products on this market is exceedingly small, and its loss to the Baku petroleum industry would scarcely be felt. The further growth of the consumption of petroleum products on the Central Asian market will depend entirely on the possibility of developing a local petroleum production. Without a local petroleum producing industry the use of petroleum products in this region would grow very slowly, and will never be of any great importance to the Baku petroleum industry.

It must also be borne in mind that in Ferghana, as well as in other parts of Central Asia, there are deposits of coal, with which petroleum produced locally can compete easily, but oil which had to be brought from Baku would find itself at a great disadvantage.

In regard to paraffin, Baku oil for practical purposes does not contain it at all. As to the manufacture of paraffin wax from Tcheleken oil, the writer is of the opinion that this can never attain any considerable dimensions, owing to the difficulty of delivering oil from Tcheleken to Baku in large quantities.

It is clear that in the near future Ferghana petroleum will obtain a large sale in the treeless regions of Central Asia, the trade and industries of which are rapidly developing. This vast market will be acquired not at the expenses of the Baku industry, but will be created by the development of the Ferghana oil fields.

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A Review of American Developments during 1906.

. . From Our Own Correspondent. . .

PITTSBURG, *January 4th*, 1907.

The production and consumption of petroleum in the United States during the past year presented some phrases that are somewhat peculiar. During that period no new fields of great magnitude were discovered, nevertheless, from at least two fields more oil was produced than could be transported to market or storage tanks erected sufficiently to provide for the rapidly increasing production. When the figures for 1906 have been compiled they will probably shew that the production does not reach the high tide of the preceding year by 10 per cent.

Had production not been restricted for the reasons named, and development work in the Mid-Continent field, California and Illinois given full sway, the margin between production and consumption would have been greatly reduced if not very nearly on even terms. Based on the reports obtainable, the production for the year will fall approximately from 10,000,000 to 15,000,000 barrels short of the consumption. The fields under development and capable bringing the production up to something near the demand for crude are unfortunately located at a disadvantage, requiring the laying of long lines under trying conditions. At no time in the history of the industry was more energy put forth to meet the requirements of an increasing production from these fields. Hundreds of steel storage tanks were erected, while the pipe line extensions were pushed forward with the greatest possible speed. While the work accomplished has brought some relief, the full equipment to meet all demands is still in the future. The problem has not been one easy of solution. The undertaking has called for the most practical men in the business to take charge of the task, and the amount of capital involved has run into the millions. An emergency of the magnitude of the one that has to be met could not be anticipated, and operators and producers alike realise the necessity of curtailing development work to prevent the oil from going to waste. Even then the loss was not inconsiderable.

Where the Oil came from.

The oil produced in the United States during the year just closed came from the following States:—California, Pennsylvania, Ohio, Indiana, Kansas, Indiana and Oklahoma Territories, Texas and Lousiana, Illinois, Kentucky and Tennessee, and small quantities from other States and territories, such as Colorado and Wyoming.

In volume the production was from each in the order named, with California again in the lead, but a marked falling off from the preceding year. In placing Pennsylvania second, the production of South-eastern Ohio is placed in the aggregate for the reason that it is of the same grade as the Pennsylvania product.

In 1905 the report of the United States Geological Survey placed the total production of petroleum, including all grades, at more than 134,500,000 barrels. The demand for crude has been in excess of the production for the past year to an extent that in some States the stocks have been almost exhausted. This is true in particular of oil of the Pennsylvania grade. The stocks of oil of the Pennsylvania grade at this time do not exceed more than 1,500,000 barrels, and unless a new source of supply is discovered, a thing not likely to occur, by the close of the present year the stocks will have been wiped out entirely. It is quite certain that the demand for high grade crude will increase rather than diminish. The cheaper grades have been substituted as far as possible, and to that cause alone can be attributed what Pennsylvania oil is now in storage.

North-western Ohio, Indiana and Texas shewed a decline in production and a heavy reduction in stocks. Texas for several years was regarded as the most likely to furnish large quantities of fuel oil, but the failure to find new and prolific fields during the year, and, added to this, a marked decline in the old, the production was many millions of barrels below the consumption. After a year's unsuccessful effort to find new fields, late in the year the movement of oil from the Territories to the Gulf began, and the two large companies, the Texas and Guffey Co. operating in Texas and Louisiana, have made the necessary arrangements to extend lines from Port Arthur to Indian Territory, and will look to that country to meet the demand. In the meantime the search for new fields in Texas and Louisiana will go forward. Illinois and the Territories alone increased their production during the year. Neither the Mid-Continent or the Illinois fields have reached the zenith of the production. In both are vast areas of undeveloped territory, and for some time to come there is no danger of a shortage of the inferior grade of crude.

Developments in Detail.

Eastern operators shewed no great amount of energy to discover new territory during the early part of the year. The market price of the western oils declined, and with each reduction in the market the price of high grade crude declined, and there was little encouragement for Pennsylvania, West Virginia and South-eastern Ohio operators to begin active operations in old territory or take up the search for new pools. Later this hindrance was removed by maintaining the price of high grade crude, instead of reducing it in sympathy with frequent reductions of the western product. An impetus was given to development work in the eastern fields, and remained fairly active to the close. The degree of success is best told by the developments in detail, shewing where expectations were realised, and, in other instances, hopes dissipated.

No new pool was carried over from the previous year, so the experimental work for the discovery of new producing territory was the feature. During the preceding year the Berea Grit pool, on Yellow Creek, in Calhoun county, had been the most active in the lower south-west fields. By the close of the year the territory had been pretty well drilled over. To the south-west of the Rowells Rnn district, in the edge of Raone county, the Carter Oil Co. had drilled in a test on the Bee Farm that shewed for a good producer, and indicated an extension to the Rowells Run district. It was late in the spring, hewever, before active operations began. The producing limits were gradually extended, and by mid-summer, and on down to the close of the year, the new extension shewed marked activity, and had more test work under way and starting than any other district. No gushers attended development work, but the wells, even though small, are profitable producers owing to their staying qualities. The average production does not exceed 20 barrels a day.

The new discoveries were widely separated, and interest shifted from one locality to another. Late in December a new well was drilled in territory that had not been regarded as capable of producing oil, but the fact was kept under cover till the 1st of January and caused quite a sensation. This was the white oil producer on the Mengert Farm in Richmond county, south of Mansfield, O. When the well was opened up in January it produced better than 250 barrels a day, and was the most discussed strike in the East. Operators flocked to that section, and leasing was very active. Large bonus money was paid for leases, and there was little time lost in starting new work. Dry holes were encountered within a few hundred feet of the producer, and of the ten or more wells drilled with the hope of extending the producing limits, all but two proved failures. One was the second test on the Mengert Farm, and the other on an adjoining farm.

A Freak Well.

The oil from the Mengert test was peculiar in colour, or rather the absence of colour, for it was as nearly white as the refined product and very high in gravity. This feature alone caused many operators of experience to hesitate about investing, and, as a consequence, the loss when it was discovered that there was not a pool of any appreciable dimensions was somewhat minimised. The old well is still producing, and the oil commands a higher price than the regular quotation for Pennsylvania crude.

In South-Eastern Ohio development work was very brisk in the Berea Grit district, near Woodsfield, in Monroe county. The production of the wells ran close to an average of 60 barrels, when first drilled in, and by the 1st of February the production from the pool exceeded 2,500 a day, and the producing limits had not been defined. For the first half of the year the Woodsfield district had a higher production than any other on the Ohio side. The producing limits have now been defined and the interior very nearly developed. Taken as whole, this district was the most profitable of any operated in South-eastern Ohio during the year.

Early in the year the salt sand territory in Ritchie county began to attract attention. On Silver Run, in Grant district, some very profitable producers were drilled in, and this inspired a general search for salt sand production in Grant, Murphy and Clay districts. During the year Ritchie county was in the lead nearly every month with work of the experimental kind. On the north and south forks of Hughes River, much of that kind of work was completed, and in the aggregate a larger area of new producing territory was developed than in any other county in the State. Aside from the few large wells found on Silver Run the production was light. At the present time the search for extensions has not been abandoned.

The Largest Pool of the Year.

It was about the middle of February that the Southern Oil Co. drilled in a test on the R. A. Workman Farm located on Point Pleasant Creek, Ellsworth district, Tyler county. The oil was developed in the Keener formation, and it did not look to be better than a 100-barrel producer. Subsequent drilling developed a second pay and the production was increased to 20 barrels an hour. The location of the well was far enough removed from any previous tests to admit of a pool, and a little of the old-time spirit was shewn by operators in their eagerness to secure leases. Liberal bonus money was paid for territory in almost every direction from the Southern Oil Co.'s producer on the Workman Farm.

Operators shewed no timidity about starting new work, and within 60 days the hustle and bustle to start and complete new work was a reminder of the busy times when Sistersville was the central attraction. Gushers followed in rapid succession, and by the latter part of July the production had been increased to more than 3,000 barrels a day. Before that climax had been reached, the producing lines had been advanced in almost every direction from the initial gusher on the R. A. Workman Farm and the outlying territory was shewing light producers and an occasional duster.

Operators were not easily discouraged and continued, the search till the last possible chance for increasing the producing area of the pool had been tested. It was then demonstrated that the pool was not much more than a mile wide and about the same in length. The principal part of the production came from Six or Eight Farm, it was discovered after the pool had been defined, the Southern Oil Co. had selected what proved to be very nearly the centre of the pool in making its initial location for a test.

After the efforts to extend the producing limits proved futile development work began to decline, and the production, although stimulated for a time by the liberal use of the high explosive fluid, started downward, and by the close of the year the pool was not producing more than 700 or 800 barrels a day. It is worthy of mention to state that the entire daily production of the pool at the close of the year did not exceed the production of a single well when the best producers were coming in. The few operators who secured territory inside of the producing limits realised handsomely on the investment, despite the fact that the wells are now small pumpers.

A few months later a discovery on Dry Run, located to the north-east of the Point Pleasant pool, made the discovery of another Keener pool look promising, but by the end of the year enongh territory had been tested to shew that faith in the territory and the prospects of a second Keener pool were not well founded. The late completions proved light or total failures, and at this the territory is attracting no attention.

Old Butler Connty Sprung a Surprise.

In the latter part of March, Butler county, as has been its custon for so many years, sprung a surprise. McCandless and Co , of Butler, drilled in a test on the Rose Farm at Petersville, in Connoquenessing township, and secured a gusher. The well flowed with great strength when the pay was tapped, and was then shut down to erect tankage. It then exerted itself and the flow increased to 45 barrels an hour. Despite the fact that the location was close to old tests and in territory that had long since been drilled over, excitemtnt ran high, and the Butler talent made a rush for and paid heavy bonus for small leases.

The well declined rapidly, but this did not deter those who had secured lots adjacent from starting new work. Not another producer of any consequence was found in the vicinity, and the only flurry that Butler county furnished was short lived, and is now only a memory, recalled unpleasantly by those who had the experience of being separated from their good money.

In the local fields the development near Burgettstown, in Washington county, was the most active and the most productive. Active operation began early in the year and by the 1st of July the production had been increased to about 1,500 barrels a day. A short time before the close of the year, and after it was thought the pool had been defined, Jennings Bros. drilled in a test to the north-east and got a good producer. It now looks as though an extension has been located.

A Deep Sand Failure.

Deep sand pool did not figure to any extent in the developments in the lower south-west fields. Occasionally a test was drilled in that promised well enough, but failure to extend the producing limits followed in almost every instance.

The greatest deep sand disappointment of the year was encountered on Pyles Fork, in Mannington district, Marion county. Late in May, Bonwel and Co. drilled in a test on the Charles Snodgrass Farm, and got a producer that started at 225 barrels a day. The oil was developed on the 30-foot formation, and it was thought a pool, similar to the one discovered on Bartholomew Run the previous year, was awaiting development.

The staying qualities of the first test, and the drilling in of other producers in the same locality, inspired great confidence, and new work was started in almost every direction from the well on the Snodgrass farm. A few producers were found, none as good as the first, and then the dry hole bright struck the pool and jolted the bank accounts of the investors. Loss of money expended in development work in this district exceeded that of any other during the year. A few of the wells that failed to find production in the 30-foot were drilled down to the fourth sand and made light pumpers. Not less than $150,000 was expended in development work, and the production of the pool at this time not above 150 barrels a day.

(To be concluded.)

The American Oil Market.

New York, Week ended Jan. 5th.

Reports from the oil fields have not been of interesting character, and developments in general, with the opening of the year, were slow, while the work under way continues light and unimportant. Indications still point to nothing but light producers, and there are a few undefined pools in the lower southwest which are likely to increase the producing area. New producing territory continues scarce, and the old field are furnishing the best results in the way of small producers. There is not much to encourage a renewal of activity during the winter months, when field work is at a disadvantage. In the Illinois field a large area of undeveloped territory remains untouched, which is capable of supplying large wells. Impassible roads, however, continue to restrict development work there. In the Indian and Oklahoma oil fields, says the *Oil, Paint and Drug Reporter*, more activity in field work is looked for, and when development work begins afresh the production bids well to shew an increase. In the mid-continent fields no changes are noted, and the December field summary of the oil fields shews that all previous records in new production and completed wells since August, have been broken. The new production was 21,370 barrels, shewing an increase of 95 wells, 6,797 barrels production and 43 unproductive wells. There were under way 192 rigs and wells drilling, shewing a gain of 46 over the November summary. The well averaged 150 barrels each. Owing to pipe lines now conveying nearly all the oil produced a general renewal of operations in the near future is looked for. In reference to the Texas oil fields nothing of interest has developed. Indications point to increased activity in the Batson oil fields during this winter, owing to some thirty new derricks having been erected south and north of the old field. The prices as quoted are for oil sold on credit balances only. Quotations for Texas oil are:—Batson, light, 65 to 70c., Humble, heavy, 62 to 70c.; Jennings, 63c.; Saratoga, 65 to 70c.; Spindle Top, 72 to 73c.; Sour Lake, 65 to 70c.; Dayton, light, 65 to 70c.; heavy, 60 to 65c., as to gravity.

Refined and Products.—The demand for refined for export has not improved, and continued moderately fair. The total engagements during the week in the local market amounted to over 179,000 barrels.

The price for barrelled oil for export remained unchanged, and the market is quoted at 7·50c. for New York loading, and 7·45c. for Philadelphia loading. The principal foreign markets remained firm. Freight rates are steady at 2s. 2d. @ 3s. 0d. hence to London, and 2s. 3d. @ 3s. 0d. to Continental ports, as to port and vessel.

Cases for export continued dull, and no sales have been reported. The price of plain tops remained stationary at 10c. Freight rates continued firm and unchanged.

Crude for export continued quiet, and no sales have been traced. Pennsylvania crude closed at 7·50c. in barrels. Cases for export have been quiet, and no sales have been reported.

Naphthas remain unchanged. For export, no sales have been reported.

CLOSING QUOTATIONS.

	Crude.	Week ended Dec. 29. 1906.	Jan. 5. 1907.
National Tran. Certificates	per bbl.	$1·58@1·59	$1·58@1·59
Pennsylvania crude in bbls.	per gal.	7·60	7·60
Pennsylvania crude in bulk	.. ..	4·50	4·50
Residuum, bbls. for export	.. ..	6@6½	6@6½

Crude at the Wells.

The quotations for oil represented by credit balances were ;—

	Week ended Jan. 5. 1906.	Jan. 5. 1907.
Tiona	1·68	1·68
Pennsylvania	1·58	1·58
North Lima	0·94	0·90
South Lima	0·89	0·85
Indiana	0·89	0·85
Canadian Oil :		
Petrolia	1·34	1·30

Refined—For Export.

		Week ended Dec. 29 1906.	Jan. 5. 1907.
Cargo Lots for export..	in barrels	7·50	7·50
	in bulk ..	4·40	4·40
Philadelphia loading ..	in barrels	7·45	7·45

Refined in Cases—110 Fire Test.

	Week ended Dec. 29.	Jan. 5.
3,000 to 10,000..	10·05	10·15
1,000 to 3,000..	10·20	10·20

Refined—Jobbing Lots.

In barrels, pkgs. included.

		Week ended Dec. 29.	Jan. 5.
120 fire test, S.W. ..	in barrels	12	12
130 fire test, S.W. ..	.. ..	12½	12½
150 fire test. W.W. ..	.. ..	13	13
In bulk from tanks	.. ..	10	10
300 fire test	.. ..	12¾@13½	12¾@13½

Naphtha and Gasolene.

	Week ended Dec. 29.	Jan. 5.
Naphtha, crude, car. lots, 68 @ 72 deg.	15·00	15·00
Gasolene, 86 deg...	23·00	23·00

Pennsylvanian Oil Runs from Dec. 28th to Jan. 3rd were:—Dec. 28th, 147,625; Dec. 29th and 30th, 275,506; Dec. 31st, 262,991; Jan. 2nd, 150,201; Jan, 3rd, 127,869. For the month of November, 3,043,408.

The Deliveries of Pennsylvania Oil for the same dates were:—147,266; 274,315; 170,996; 130,272; 139,664. For the month of November, 4,960,028.

Charters for the Week.

The total charters for refined, crude, naphtha, etc., in bulk, barrels and cases, during the week ended January 4th and from Jan. 1st, were as follows:—

	Week.	Year.	1906.
Refined, barrels and bulk	178,990	11,753,000	138,500
Refined, cases	—	15,104,100	511,000
Crude, barrels and bulk..	—	1,431,800	—
Crude, cases	—	325,000	—
Naphtha, barrels	—	277,300	—
Residuum, barrels ..	—	684,901	—
Lubricating, barrels ..	—	—	—
Total, barrels cde. eq. ..	286,003	23,535,853	391,587

Clearances for the Week.

During the week ended Jan. 4th, and since Jan. 1 the clearances of petroleum, in gallons, from the port of New York, were as follows:—

	Week.	Year.	1906.
Refined	10,054,070	10,054,070	9,114,350
Crude	—	—	—
Naphtha	69,100	69,100	60,540
Residuum	2,000	2,000	—

Export Statistics.

The total exports from the port of New York and from the United States have been:—

	Gallons.
From New York, week ended Jan. 4th ..	13,405,426
Total from New York, from Jan. 1st, 1907 ..	13,405,426
Same period last year	12,152,467
Increase	1,252,959
From United States, week ended Jan. 4th ..	17,365,779
Total from United States, since Jan. 1, 1907	17,265,779
Same period last year	16,582,737
Increase	783,042

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The "Review" Shipping List.

January 18, 1907.

(The following abbreviations are used in this table:—L. Left; P. Passed; Arr. Arrived; Sp. Spoken; Tr. Trading.)

Vessel.	From.	For.	Latest Date and Position.
ALICE ISABELLE	Philadelphia	Sables d'Olonne	P. Delaware Bk. Dec. 23
ALCHYMIST	London	Southampton	Arr. Jan. 12
ALEMBIC	Sydney (C.B.)	New York	L. Dec. 19
AMERICAN	San Francisco	New York	L Dec. 19
APPALACHEE	San Francisco & Tongku	Shanghai	Arr. Dec. 11
APSCHERON	Batoum	Barcelona & St. Louis (Rhone)	L. Jan, 11
ARAL	Hamburg	Philadelphia	In Tyne Dec. 31
ARAS	Newport	Philadelphia	L. Jan. 12
ARGYLL	Port Harford	Ancon	L. Dec 31
ASTRAKHAN	Philadelphia	Dover	P. Scilly, Jan. 16
AUGUST KORFF	Philadelphia	Manchester	Arr. Jan. 15
AUREOLE	Tyne	Philadelphia	P. Dunnet Head, Jan. 7
ATLAS	Redondo	San Francisco	Arr. Dec 17
AZOV	—	—	Trading on W.C. of South Amca.
BAKU STANDARD	Kustendje	Rouen	P. Constant'ple, Dec. 31
BALAKANI	London	Port Arthur (Texas)	P. Prawle, Jan. 10
BATOUM	Philadelphia	London	P. Delaware Bk., Jan. 6
BAYONNE	Hull	Tyne	Arr. Nov. 23
BEACON LIGHT	Tyne	Philadelphia	L. Jan 5
BEME	Rangoon	Calcutta	L. Jan. 14
BLOOMFIELD	Philadelphia	Avonmouth	Arr. Jan. 16
BORJOM	Batoum	Odessa	L. Dec. 28
BRILLIANT	Philadelphia	Copenhagen	P. Butt of Lewis, Jan. 15
BROADMAYNE	Antwerp	Tyne	Arr. Jan. 5
BULLMOUTH	Balekpappan	—	L. Jan. 13
BULYSSES	Cardiff	Balekpappan	Arr. Jan. 6
BURGERMEISTER PETERSEN	Stettin	Philadelphia	L. Tyne, Jan. 13
CADAGUA	Philadelphia	Rouen	P. Del. Break., Jan. 2
CALCUTTA	Shanghai	San Francisco	Arr. Jan. 2
CARDIUM	Barrow	Cardiff	Arr. Jan 10
CATANIA	New York	San Francisco	Arr. Jan. 12
CAUCASIAN	Philadelphia	Belfast	P. Del. Break, Jan. 3
CHARLOIS	Baltimore	Dover	L. Jan. 7
CHESAPEAKE	Messina	New York	Arr. Dec. 28
CHESTER	Philadelphia	Antwerp	P. Del. Break, Jan. 3
CIRCASIAN PRINCE	—	—	Trading on W. C. of South Amca.
CLAM	Balekpappan	—	L. Jan. 14
COWRIE	Cardiff	—	P. Malta, Jan. 13–14
COL. E. L. DRAKE	New York	Sabine Pass	P. Sand Key, Dec. 1
CYMBELINE	Penarth	Philadelphia	Arr. Jan. 13
CZAR NICOLAI II.	Batoum	Hamburg	P. Dover, Jan. 15
DAGHESTAN	Batoum	Antwerp	Arr. Jan. 12
DELAWARE	Manchester	Philadelphia	P. Brow Head, Jan. 3
DEUTSCHLAND	Rotterdam	New York	Arr. Jan. 9
DIAMANT	Philadelphia	Hamburg	P. Del. Break., Jan. 5
ELAX	—	Tyne	Arr. Jan. 12
ELISE MARIE	Tyne	Philadelphia	P. Dunnet Head, Jan. 10
ENERGIE	Tyne	Philadelphia	P. Dunnet Head, Jan. 12
ERIVAN	Manchester	Batoum	L. Jan. 16
ETELKA	Dunkirk	Batoum	L. Const'iple, Jan. 9
EUPLECTELA	Hamburg	Batoum	L. Const'ple, Jan. 8
EXCELSIOR	New York	Messina	L. Dec. 31
EZIO	—	—	Coasting Peru
FRANCE MARIE	Marseilles	Philadelphia	Arr. Jan. 12
GEESTEMUNDE	Hamburg	Philadelphia	Arr. Jan. 13
GENESSE	Manchester	Sunderland	Arr. Jan. 5
GEORGIAN PRINCE	Tyne	Havana	L. Key West, Jan. 3
GOLDMOUTH	Singapore	—	L. Dec. 27
GUT HEIL	Tyne	Philadelphia	Arr. Jan. 14
HAINAUT	New York	Antwerp	L. Dec. 25
HELIOS	Tyne	Philadelphia	P. Dunnet Head, Jan. 13
HOTHAM NEWTON	New York	Lisbon and Oporto	L. Jan. 8
HOUSATONIC	Bengkalis (Sumatra)	England	At Port Natal, Jan. 11
IMPERIAL	—	—	Tr. on Lakes btn. U.S. and Can.
JOANNIS COUTZIS	Ismailia	Piræus	Arr. Dec. 28
J. B. AUG. KESSLER	Palembang	—	At Port Natal, about Jan. 11
JAMES BRAND	Santander	Kustendje	P. Constant'ple. Jan. 10
JULES HENRY	Philadelphia	Marseilles	Arr. Jan. 1
KURA	Philadelphia	Manchester	L. Jan. 6
LA CAMPINE	Antwerp	New York	Off the Wight, Jan. 9
LA FLANDRE	Ghent	New York	Arr. Jan. 2
LA HESBAYE	New York	Antwerp	Arr. Jan. 13
LA MADELEINE	Dunkirk	Nantes	Arr. Dec. 21
LA VIGUESA	Vigo	Philadelphia	Arr. Jan. 1 for Seville
LACKAWANNA	New York	Calcutta	P. Perim, Jan. 8
LANSING	San Francisco	Honololu	L. Port Hartford, Dec. 20
LE COQ	Pauillac	Tyne	L. Jan. 10
LOUTSCH	Barcelona	Novorossisk	Called Messina, Jan. 6
LUCERNA	Tyne	Philadelphia	Arr. Jan. 16
LUCIFER	Venice	New York	L. Algiers, Jan. 3
LUCIGEN	Tyne	Philadelphia	P. Dunnet Head, Jan. 3
LUCILINE	Tyne	Philadelphia	Arr. Jan. 14
LUMEN	London	Tyne	Arr. Jan. 10
LUX	Novorossisk	Rouen	L. Constant'ple, Jan. 9
MANHATTAN	St. Louis (Rhone)	Philadelphia	Arr. Dec. 27
MANNHEIM	New York	Copenhagen	L. Jan. 4
MARGARETHA	Alexandria	Batoum	P Dardenelles, Jan. 5
MAVERICK	New York	San Francisco	Arr. Jan. 2
METEOR	Catania	Nicolaieff	Arr. Jan. 3
MEXICAN PRINCE	Batoum	Hull	In Downs, Jan. 15
MIRA	Manchester	Philadelphia	Arr. Jan. 14
MUREX	Yokohama	Balekpappan	Arr. Jan. 14
NARRAGANSETT	London	New York	P. Prawle Pt., Jan. 10
NERITE	—	—	Tr. in China Seas
NEW YORK	New York	Southampton	L. Jan. 14
OCEAN	New York	Amsterdam	Off I. of W., Jan. 16
OILFIELD	Barry	Philadelphia	P. Fastnet, Jan. 16
ORANJE PRINCE	Flushing	Tyne	Arr. Jan. 13
ORIFLAMME	Philadelphia	Blaye	At Pauillac, Jan. 3
OSCEOLA	Genoa	Cape Verds	P. Gibraltar, Jan. 12
OTTAWA	Hull	Philadelphia	P. Lizard, Jan. 2
OURAL	Batoum	Dunkirk	P. Oitavos, Jan. 15
PALEMBANG	—	—	Tr. Sts. Settlem'ts & China Seas
PAULA	Amsterdam.	—	P. Beachy Head, Jan. 16
PECTAN	London	Emden and Galveston	At Emden, Jan. 15
PENNOIL	Philadelphia	Rotterdam	Arr. Jan. 15
PERLAK	Palembang	Yokohama	L. Singapore, Nov. 25
PHOEBUS	Rotterdam	New York	P. Prawle Pt., Jan. 10
PINNA	Hamburg	—	Off I. of W., Jan. 15

Vessel.	From.	For.	Latest Date and Position.
POTOMAC	Avonmouth	New York	Arr. Jan. 5
PROMETHEUS	New York	Rotterdam	L Jan. 6
PRUDENTIA	Liverpool	Port Arthur	L. Dec. 23
QUEVILLY	Philadelphia	Rouen	P. Del. Break, Jan. 11
RION	Kustendje	Manchester	P. Constant'ple, Jan. 9
ROCK LIGHT	Kustendje	London	Arr. Jan. 6
ROSSIJA	Honfleur	Tyne	Arr. Dec. 19
ROTTERDAM	Tyne	New York	Arr. Jan. 10
RUSSIAN PRINCE	Antwerp	Hamburg	L. Dec. 27
SALAHADJI	—	—	Tr. Sts. Settlem'ts and Java Seas
SAXOLEINE	Tyne	Philadelphia	Arr. Jan. 7
SEMINOLE	San Francisco	Kurrachee & Bombay	L. Jan. 6
SILVERLIP	Cardiff	Balekpappan	P. Sagres, Jan. 15
SINGU	—	—	Tr. in East Indies
SNOWFLAKE	Sulina	Rouen	Arr. Jan. 13
SOPHIE	Venice	Malta	Arr. Jan. 7-8
SPONDILUS	Balekpappan	Thameshaven	Arr. Jan. 13
STANDARD	Philadelphia	Hamburg	P. Del. Break., Jan. 6
STROMBUS	Cardiff	New York	L. Jan. 14
SURAM	New York	Hull	P. Aldeburgh, Jan. 15
SUWANEE	London	Philadelphia	P. Lizard, Jan. 10
SVIET	Batoum	Odessa	L. Dec. 26
TELENA	Singapore	—	L. Jan. 10
TEREK	Hamburg	New York	P. Lizard, Jan. 14
TIFLIS	Rouen	Batoum	Arr. Jan. 11
TIOGA	Manchester	Galveston	P. Eastham, Dec. 24-25
TONAWANDA	Hong Kong	San Francisco	Arr. Jan. 14
TROCAS	Singapore	Soesoe	L. Nov. 8
TURBO	Barry	Black Sea	L. Jan. 14
TUSCARORA	San Francisco	Shanghai	L Dec. 15
TWINGONE	Rangoon	Calcutta	L. Jan. 16
VEDRA	Batoum	Manchester	L. Constant'ple, Jan. 5
VILLE DE DIEPPE	—	—	In Port Havre, Jan. 7
VILLE DE DOUAI	Hull	Philadelphia	P. Lizard, Jan. 7
VOLUTE	Palembang	—	L. Singapore, Jan. 13
WEEHAWKEN	Belfast	Philadelphia	L. Jan. 1
WASHINGTON	Kustendje	Bombay	At Port Said, Jan. 12-13
WILLKOMMEN	Hamburg & Tyne	New York	Arr. Jan. 15
WINNEBAGO	San Francisco	Shanghai	Arr. about Dec. 24

Latest Market Intelligence.

LONDON OIL MARKET.

Supplied by Messrs. Benjamin & Gee, 31, St. Mary Axe, E.C.

January 18th, 1907.

Refined petroleum is unaltered in price as follows:—Russian and Roumanian, 6¼d.-6⅜d.; American, 6¾d-6⅞d.; Water White, 7¾d.-7⅞d.

LUBRICATING OILS

There are no changes to report, prices remaining:—
American pale, £7 to £9 10s.
American dark cylinder, from £7 2s. 6d.
American filtered cylinder, from £11.
Shellene, £4 15s. 0d.
No. 1 Russian, £10 7s. 6d.

TURPENTINE.

American Turpentine has advanced in price and is very firm at 51s. 3d. for Spot, and 52s. February/April.

LIVERPOOL OIL MARKET.

January 18th.

Refined oils are quiet, and sellers quote 6½d. for Russian, Galician or Roumanian; and 6⅝d. to 7⅝d. per gallon for American.

Petroleum Spirit continues at 1s. 0½d. to 1s. 3d. per gallon for American deodorised, according to quality on the spot.

LATEST AMERICAN PRICES.

New York, January 18th.

Refined, in cases, is steady at 10·10; Standard White, 7·60; Credit balances, 1·60c.

Philadelphia, January 18th.

Standard White is still quoted at 7·45.

RUSSIA.

Baku, January 12th.

The Baku oil market is firm. Light crude oil, spot, 25¼ copecs per pood; residuals, 26½ copecs.

BELGIUM.

Antwerp, January 12th.

The petroleum market remains stagnant. Price of Standard White, spot, 20 francs per 100 kilos.

FRANCE.

Paris, January 12th.

Illuminating oil is quoted in bulk, in whole tank waggons, 22 francs per hectolitre; spirit, 28 francs per hectolitre. Special white oil, 30 francs per hectolitre.

GERMANY.

Hamburg, January 11th.

The kerosene market is firm. The price of American Standard White is 6·80 marks per 50 kilos, Russian, 6·55 marks.

ROUMANIA.

January 14th.

	Francs.
Crude oil from different fields, including pipe line charges, per 100 kgs.	4·00-4·10
Refined oil, exclusive of taxes	13·00- —
Motor benzine, including taxes	16·00-18·00
Benzine, doubly refined	24·00-25·00
Residuals in tank waggons, at refinery	3·20-3·30
Paraffin	120·00-125·00
Lubricating Oils—	
Agricultural	30-32
Prime	35-37
Extra	40-42
Royal	45-46

In barrels free on rail including octro tax of 12 fcs. per 100 kilos

Prices for Export.

Refined oil in tank waggons, per 100 kgs.	8·50- —
Benzine, sp. gr. 0·710-0·715	15·50-16·50
,, sp. gr. 0·720-0·725	14·50-15·50
,, sp. gr. 0·730-0·740	11·50-12·50
,, sp. gr. 0·745-0·755	7·50- 8·50

INDIA.

Bombay, January 2nd.

Petroleum is steady.

Standard Oil Co., of New York.

Current rates are:—

American, "Snowflake," 150 deg.	Rs. 6	0	2
,, Chester, 125 deg.	4	8	2
,, Monkey Brand, 125 deg.	4	2	2
,, Bulk, 125 deg. (in local made tins)	3	10	0
,, ,, 125 deg. (8 Imperial gallons)	3	0	0
,, "White Camelia" brand, 125 deg.	No stock.		

The Asiatic Petroleum Company, Limited.

Current rates are:—

Burmah oil, in tins, per pair	3	2	0
Borneo oils, in tins, per pair	3	2	0
Sumatra "Rising Sun," bulk, per unit	3	0	0
,, ,, tins, per pair	3	10	0
Silverlight cases, per case	4	8	0
Russian, "Anchor," cases	4	14	0

TRANSLATIONS.

Technical, Legal and Commercial Translations from and into Russian, German, French, etc., undertaken with accuracy and dispatch by—

S. JOLSON,
126, COPTHALL HOUSE, COPTHALL AVENUE, E.C.

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IMPORTS of PETROLEUM into UNITED KINGDOM

Specially prepared for this Journal by the Custom House.

FOR THE WEEK ENDED JANUARY 7TH, 1907—

Date.	Port and Importers.	Description.	No. of Galls.	Port Whence.
Jan.	LONDON—			
1	Scott's Wharf	Lub.	6,000	New York
1	A. Brown and Co.	,,	2,800	Philadel.
1	Worthington and Boler	,,	6,000	,,
2	E. J. Walkinshaw	,,	10,000	,,
2	Mordaunt Bros.	,,	6,200	,,
3	London & India Docks Co.	,,	1,000	Hamburg
3	Grindley and Co.	,,	2,000	New York
3	Fielder, Hickman and Co.	,,	4,800	,,
3	London and India Dock Co.	,,	400	,,
3	Anglo-American Oil Co.	,,	46 990	,,
3	,, (Suwanee)	Naph.	426,030	Kustendje
3	,, ,,	Benzine	165,420	,,
3	H. P. Wheatley and Co. (Lumen)	Lamp	280,000	Batoum
4	Consolidated Petroleum Co. (Rock Light)	Gas	1,065,900	Kustendje
4	Shell Transport Co. (Elax)	,,	510,000	Pt. Arthur
4	Bowring Petroleum Co.	Lub.	9,860	Philadel.
4	,,	,,	720	Christiana
4	T. H. Lee	,,	260	Hamburg
5	Grindley and Co.	,,	10,000	Philadel.
5	Trinidad Lake Asphalt Co.	,,	2,580	,,
5	G. and H. Green	,,	3,330	New York
5	Anglo-American Oil Co. (Narragansett)	,,	265,560	,,
5	,, ,,	Lamp	2,705,950	,,
5	,, (Suwanee)	,,	294,430	Kustendje
5	,, ,,	Fuel	126,700	,,
7	,,	Lub.	20,600	Philadel.
7	Lubricating and Fuel Oils	,,	8,200	,,
7	Mordaunt Bros.	,,	16,500	,,
7	G. W. Sheldon and Co.	L.Comp	1,000	New York
	LIVERPOOL—			
1	Ismay, Imrie and Co.	Lub.	6,000	,,
1	W. B. Dick and Co.	,,	50,950	,,
1	Geo. B. Taylor	,,	57,880	,,
1	,,	,,	50,940	,,
1	E. H. Kellogg and Co.	,,	4,000	,,
1	Cunard Steamship Co.	,,	85,930	,,
1	Valvoline Oil Co.	,,	17,630	,,
1	,,	,,	9,220	,,
1	E. H. Kellogg and Co.	,,	2,000	,,
1	Meade-King, Robinson & Co.	,,	4,800	Baltimore
1	W. Gibson and Son	Lamp	2,260	Boston
2	Liverpool Storage Co.	Lub.	9,000	New York
2	Meade-King, Robinson & Co.	,,	4,000	,,
2	,,	,,	4,000	Philadel.
7	,,	,,	10,400	Hamburg
7	A. Hopps and Sons	M.Colza	5,440	Baltimore
7	Geo. B. Taylor	Lub.	7,200	New York
7	Liverpool Warehousing Co.	,,	320	,,
	BARROW—			
3	Asiatic Petroleum Co. (Cardium)	Spirit	1,043,280	Balek Pappan
Jan.	BRISTOL—			
1	Western Pet. Co. (Turbo)	Lamp	828,000	Hamburg
2	Pickford's, Ltd.	Lub.	650	,,
3	Heaton and Co.	,,	410	Antwerp
7	Bowring Petroleum Co.	,,	3,040	New York
7	,,	M.Colza	2,400	,,
7	W. Smith and Co.	Lub.	8,160	,,
7	Anglo-Bosphorous Oil Co.	,,	240	Hamburg
	GRIMSBY—			
1	J. Sutcliffe and Son	,,	360	Antwerp
	HULL—			
1	Wilsons and N.E. Railway Shipping Co.	,,	1,280	Hamburg
1	,, ,,	,,	3,680	Antwerp
3	,, ,,	,,	1,200	Hamburg
3	,, ,,	,,	25,080	New York
3	Meade-King, Robinson & Co.	Naph.	16,000	Rotterdam
3	Helmsing and Co.	Lub.	6,000	Riga
3	Hull and Neths. S.S. Co.	Tar oil	3,800	Rotterdam
	MANCHESTER—			
1	Anglo-American Oil Co. (Genesee)	Gas	666,560	Philadel.
1	W. Hodgson and Co.	Lub.	1,200	New York
2	Meade-King, Robinson & Co.	,,	4,000	,,
2	Liverpool Storage Co.	,,	2,460	,,
3	Lamport and Holt	,,	1,680	,,
3	Bramwell, Fern and Co.	,,	840	,,
3	A. H. Dawson and Co.	,,	1,200	,,
3	Worthington and Boler	,,	2,500	Philadel.
4	Manchester Liners	,,	850	,,
	MIDDLESBRO'—			
1	J. J. Sutherland	,,	560	Antwerp
	NEWCASTLE—			
3	Tyne-Tees Steamship Co.	,,	350	Hamburg
3	,,	,,	400	Antwerp
	SWANSEA—			
1	Burgess and Co.	,,	280	Hamburg
2	T. P. Richard and Co.	,,	2,400	New York
	ABERDEEN—			
2	Meade-King, Robinson & Co.	C.Naph.	16,450	Rotterdam
	GLASGOW—			
3	Clyde Shipping Co.	Lub.	440	Antwerp
3	Anchor Line	,,	63,360	New York
7	J. and A. Allan	,,	82,150	Philadel.
7	,,	M.Colza	19,000	,,
	GRANGEMOUTH—			
1	J. Currie and Co.	Lub.	7,950	Hamburg
1	,,	,,	8,000	,,
1	J. Rankine and Sons	Lub.Gr.	400	Antwerp
4	W. Graham-Yooll and Co.	Lamp	2,000	Hamburg
4	J. Currie and Co.	L.Paste	320	,,

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Date	Port and Importers.	Description.	No. of Galls.	Port Whence.
Jan.	LEITH—			
1	J. Currie and Co.	Lub.	440	Hamburg
4	G. Gibson and Co.	,,	140	Antwerp
5	Henderson and McIntosh	,,	16,880	Philadel.
7	J. Currie and Co.	,,	1,680	Hamburg
	BELFAST—			
1	Anglo-American Oil Co. (Weehawken)	Lamp	436,120	Philadel.
	Total for Week		9,623,730	

FOR THE WEEK ENDING JANUARY 14TH, 1907—

Date.	Port and Importers.	Description.	No. of Galls.	Port Whence.
	LONDON—			
8	Scott's Wharf	Lub.	3,000	New York
8	Lennon	,,	220	,,
8	Fielder, Hickman and Co.	,,	26,000	Philadel.
8	H. Finkler and Co.	,,	3,740	Fiume
8	G. W. Sheldon and Co.	,,	280	Antwerp
9	T. H. Lee	,,	140	Hamburg
9	Anglo-American Oil Co.	,,	44,000	Philadel.
9	,,	M.Colza	4,000	,,
9	McDougall and Boulton	Lub.	5,860	,,
9	Mordaunt Bros.	,,	3,500	New York
10	Anglo-American Oil Co.	,,	79,960	,,
10	,,	Lub. Gr.	2,240	,,
10	W. Graham-Yooll and Co.	Lamp	6,150	Hamburg
10	A. Brown and Co.	Lub.	2,000	,,
10	G. W. Sheldon and Co.	,,	460	Antwerp
11	London and India Dock Co.	,,	700	Hamburg
11	,, ,,	,,	1,000	New York
12	G. and H. Green	,,	3,330	,,
12	Asiatic Petroleum Co. (Spondilus)	Benzine	1,045,300	Balek Pappan
14	G. W. Sheldon and Co.	Lub.	800	Antwerp
	LIVERPOOL—			
8	Valvoline Oil Co.	,,	1,030	New York
8	Geo. B. Taylor	,,	2,400	,,
8	W. B. Dick and Co.	,,	13,690	,,
9	Liverpool Storage Co.	,,	3,600	,,
9	Ismay, Imrie and Co.	,,	720	,,
9	Meade-King, Robinson & Co. (Erivan)	,,	195,000	Batoum
10	Bramwell, Fern and Co. (Erivan)	,,	200,250	,,
12	Anglo-American Oil Co. (August Korff)	,,	432,000	Philadel.
12	,, ,,	Gas	177,860	,,
12	Worthington and Boler	M.Colza	720	,,
12	,,	Lub.	10,200	,,
12	Crew, Levick and Co.	,,	33,090	,,
14	Meade-King, Robinson & Co.	,,	60,800	,,
14	George B. Taylor	,,	40,000	,,
14	W. B. Dick and Co.	,,	19,940	,,
14	,,	,,	3,100	New York
14	Burnaby and Chantrell	Lub.Gr.	1,010	,,
14	George B. Taylor	Lub.	6,400	,,
14	Vacuum Oil Co.	,,	10,460	,,
14	A. Hopps and Sons	,,	2,410	Baltimore
Jan.	BRISTOL—			
8	H. R. James and Sons	Lub.	8,560	New York
12	,,	,,	19,400	,,
12	,,	M.Colza	18,000	,,
12	W. Smith and Co.	Lamp	12,000	,,
12	,,	Lub	37,000	,,
12	Pickfords	M.L.P.	680	Hamburg
12	E. Stock and Sons	Lub.	160	,,
	GRIMSBY—			
10	J. Sutcliffe and Son	,,	2,360	Antwerp
	HULL—			
8	Wilsons and N.E. Railway Shipping Co.	,,	960	Hamburg
8	,, ,,	,,	200	Copenhagen
8	,, ,,	,,	560	New York
10	W. Gilyott and Co.	,,	600	,,
10	,,	,,	3,000	Boston
11	Helmsing and Son	,,	4,000	Riga
11	Hull & Netherlands S.S. Co.	Tar Oil	2,400	Rotterdam
	MANCHESTER—			
8	Crew, Levick and Co.	Lub.	25,540	Philadel.
8	Liverpool Storage Co	,,	4,020	,,
8	Meade-King, Robinson & Co.	,,	71,640	,,
8	,,	M.Colza	2,400	,,
10	,,	Lub	10,400	Hamburg
10	,, (Erivan)	,,	181,250	Batoum
10	,,	,,	3,750	,,
12	Bramwell, Fern and Co.	,,	2,740	,,
12	,, (Erivan)	,,	184,920	,,
12	,,	,,	2,000	New York
12	George B. Taylor	,,	90,360	,,
14	W. Hodgson and Co.	Lub. Gr	1,320	,,
14	Liverpool Storage Co.	Lub.	5,070	,,
14	Henry Wells Oil Co.	,,	480	Philadel.
14	Fletcher, Woodhill and Co.	Benzine	2,500	Treport
	MIDDLESBRO'—			
10	E. Harris and Co.	Lub.	240	Antwerp
	NEWCASTLE—			
12	Tyne-Tees S.S. Co.	,,	6,280	,,
12	W. Swanston and Sons	,,	440	Amsterdam
14	Furness, Withy and Co.	,,	13,680	New York
14	C. Hassell and Son	,,	83,680	,,
	DUNDEE—			
10	A. B. Fleming and Co.	,,	4,230	Riga
	GLASGOW—			
8	Anchor Line	,,	63,180	New York
11	Clyde Steamship Co.	,,	220	Antwerp
	LEITH—			
10	W. Gibson and Co.	,,	2,640	,,
11	W. Graham-Yooll and Co.	Lamp	10,900	Hamburg
	GRANGEMOUTH—			
14	J. Currie and Co.	Lub.	13,760	,,
14	,,	L. Paste	620	,,
	Total for the Week		3,345,500	
	Total for the past Fortnight		12,969,230	

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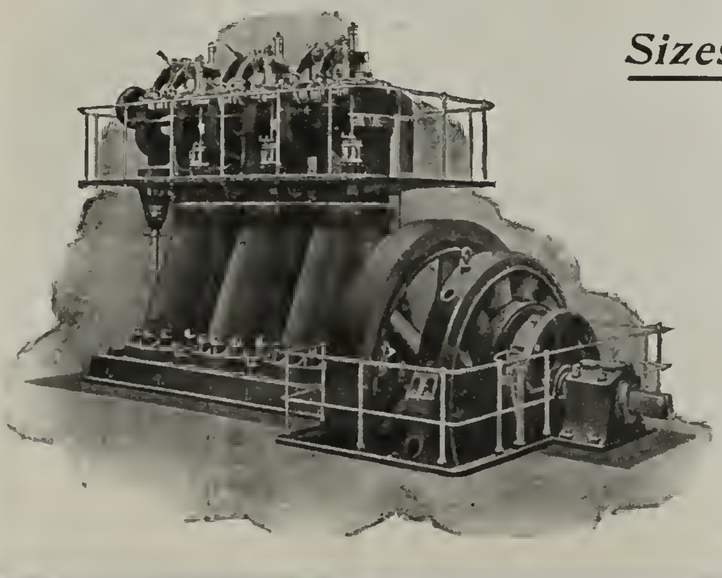

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The Petroleum Review.

By PAUL DVORKOVITZ.

Vol. XVI. *(New Series.)* February 2nd, 1907. No. 391.

Editorial Notes.

Our Petroleum Imports.

It is always interesting to dive into the statistics concerning the petroleum import trade of the United Kingdom, and our present issue is evidence of the importance we attach to this matter. As we explain, a very startling difference has been shewn between the published figures which we give of the petroleum imports into this country and those recently issued by the Board of Trade for the year 1906 bearing upon the same subject, and so we have felt it our duty to acquaint our readers of the actual facts rather than that they should be inclined to take the conclusions of the Board of Trade as being correct. To the Statistical Department of the Board of Trade it may be that the difference of a few million gallons one way or the other makes little difference, but to the oil men in this country, the question of our imports is too serious a matter to be haphazardly dealt with. In the present case the Board of Trade, bent, we should imagine upon making all trade statistics appear as satisfactory as possible, has included four imaginary cargoes of bulk illuminating oil, amounting to considerably over 20,000 tons in their statistics, and the consequence is that their figures differ very materially from those published in the Review and officially supplied by the Customs Authorities. Elsewhere we publish the correct import figures of illuminating oil, and place alongside these the details announced by the Board of Trade, and would take this occasion to remind our readers that we use every endeavour to see that the statistical data given in the Review can be thoroughly substantiated. After all, if statistics are not accurate, what good are they?

American Petroleum Exports during 1906.

The petroleum export trade of America during the past twelve months, all things considered, cannot but be regarded as highly satisfactory, for the total quantity exported was about 20,000,000 gallons in excess of that sent abroad during the preceding twelve months, while the value was nearly $5,000,000 greater. During the second half of the year, the export trade somewhat declined, this being the natural result of the Roosevelt agitation against the Standard Oil Co., but it is gratifying to find that the prejudice which was aroused for a time against American petroleum has been lived down in so short a time, for during the closing month of the year the exports of petroleum products were practically up to their normal level. The most conspicuous change which has overtaken the American petroleum export trade during the past year is that in regard to the lubricating oils which have advanced enormously, the total exports of lubricants during 1906 being nearly 40,000,000 gallons in advance of the figures for 1905. The only other increase that is noted by the Bureau of Statistics in regard to the exportation of American petroleum is in crude oil where the increase has for the past year been about 17 per cent. In illuminants and also in petroleum spirit decreases are shewn, that in illuminating oils being about the same in amount as is the increase in lubricants. Apart from these changes, it is a source of gratification to find that the American export trade has come through the past year so well, especially considering the fact that the trade with the United Kingdom shewed some sllght decline during the twelve months.

The Benzine Market in Germany.

Like the trade in benzine with this country, so is that of Germany assuming a greater importance, for according to the official statistics just published, the consumption for the past twelve months has been almost double that of the United Kingdom, amounting to no less than 150,000 tons. For several years past, Germany's benzine trade has shewn substantial and consistent growth, and the consumption has year by year increased by about 25 per cent., until now it is estimated that the demand during the present year will not be far short of 200,000 tons. As shewing the highly remunerative nature of the benzine trade in Germany for the firms engaged in it, our contemporary *Petroleum* mentions that the Actien Gesellschaft füer Petroleum Industrie has for for the past six years shewn profits of a yearly average of 65 per cent. on the capital. Whether the future trade will be so profitably carried on remains to be seen, for, as our readers will note from another page, we record the formation of a new company in Regensburg which intends to erect refineries at Hamburg, Regensburg and elsewhere. This new concern has based its calculations for profits upon a moderate selling price of its benzine which it is to secure from the Grosny fields, yet it nevertheless anticipates that substantial profits will be made.

Baku during 1906.

Though unofficial, the figures which we publish in this issue of the production by the various firms operating in the Baku fields during 1906 are worthy of more than passing attention. We have previously touched upon the total output from Baku during 1906, and, therefore, it is only necessary that we should on this occasion go a little before the surface and note the tendency of the operations of the various producing firms during the year under review. In accord with the prevailing condition of things as shewn in the total figures where a decrease of about 150,000,000 poods from the production during normal periods has been brought about during 1905, the vast majority of the firms have had a diminished output, due, as our readers are aware, to circumstances which have long been common property. In 1905, too, the Russian fields passed through an abnormal period of strike and incendiarism, and so if we desire to make comparisons we must glance back to 1904 when the fields enjoyed almost entire immunity from disorders.

The Russian versus the English Companies.

At the head of the list of chief producers in the Baku field we naturally find that Messrs. Nobel Bros. during the past year greatly improved their output of 1905, though still the figures are far behind those of 1904, a remark which applies almost without exception to the whole of the Russian producers. It is strangely significant, however, that the English companies have fared so very badly, for though in practically every instance the Russian firms did better in 1906 than in 1905, the English concerns without exception experienced another period when production had a severe check. Compared with their yield of 1904, the production of three companies alone has declined from 68,000,000 poods to 30,000,000 poods—a state of things which all the eloquence in the world could not prove as satisfactory. When the English firms experienced such a falling off in production during 1905 as against 1904, the decrease was by no means so acute with the Russian companies, but now the latter have rallied and are well on the way to reach the producing level of 1904, yet on the other hand, the English companies have passed through another period of consistent decline.

BORYSLAW PRODUCTION DURING NOVEMBER AND DECEMBER BY FIRMS.

The following was the production of crude oil by the principal producing firms at Boryslaw and Tustanowice in November and December, 1906:—

	November. Tons.	December. Tons.
Karpathen	3,310	3,390
Dlugosz and Laszcz	2,920	910
Litwa	2,200	2,430
Baroness Popper and Co.	2,080	2,500
Mikucki and Perutz	1,990	1,930
Boryslaw Syndicate	1,910	3,840
Urycz-Fenerstein, I.	1,410	1,390
Scott and Buber	1,380	1,430
Urycz Schreyer, II.	1,290	1,430
Galicyjska Spolka Naftowa	1,290	1,060
Nahlik	1,140	1,730
Tgnacy	1,040	330
Ressegnier and Fraenkel	1,040	1,110
Lampenmuhlen	1,000	1,640
Bitum	600	1,900
Fanto-Wolanka	—	1,170
Gwiazda	—	1,080
Hermann	—	1,450
Sussmann and Co.	240	2,440

BAKU PRODUCTION DURING DECEMBER.

The total production of crude oil at the Baku oil fields in December (o.s.) amounted to 45,617,397 poods, to which the Bebe-Aibat field contributed 12,537,941 poods. The production by spouters amounted to 199,900 poods, and was all obtained at Ramany.

THE HOMELIGHT OIL COMPANY, LIMITED.

STAFF DINNER AT MANCHESTER.

The members of the Manchester branch of the Homelight Oil Co., Ltd., held their second annual dinner on January 18th, at the Albion Hotel, Manchester, and a very enjoyable evening was spent by the staff and their friends at Cottonopolis.

The manager of the Manchester branch—Mr. G. H. Watson—took the chair, Messrs. Wm. Wainwright and Thos. Eyres being the vice-chairmen for the evening. The arrangements were admirably carried out by the stewards—Messrs. Thos. Lloyd, J. W. Dobson, J. W. Pritchard and T. H. Watson—to whom the thanks of the company are due for the energies which were put forward in order that everyone might be made thoroughly comfortable. Mr. J. B. Mc. Clurg, the general manager of the Homelight Oil Co., honoured the gathering by his presence, while among others we noticed Dr. Dvorkovitz (the company's technical adviser), Alderman Ramsden (Bolton), Councillor S. Walker (Hanley), and Mr. G. A. Dickin (Shrewsbury).

After an excellently served repast had been done full justice to, a commendably brief toast list was gone through, this being interspersed with songs and recitations. The Chairman opened the programme by submitting the loyal toast of the King, which was received with musical honours, the company rising and joining in the National Anthem. Then followed the toast of the evening, the "Homelight Oil Co.," which was placed in the able hands of the Chairman, who spoke of the splendid way in which he was supported by his assistants in Manchester. He expressed the pleasure which it gave the Manchester staff to see that their general manager, Mr. Mc. Clurg, had honoured their gathering by being present, and he coupled that gentleman's name with the toast. Mr. J. B. Mc. Clurg appropriately responded, and said that so long as they had the benefit of the loyal services of Mr. Watson and his staff at Manchester he was convinced that their operations would continue to be singularly successful. "The Branch Office Staff" was the next toast proposed by Mr. J. Wilson and responded to by Mr. W. Chapman, and this was followed by the company drinking to the health of the agents and travellers, Alderman Ramsden, Messrs. Dickin and G. A. Cartali giving the response. To Mr. Mc. Clurg fell the toast of the "Visitors" with which was coupled the names of Dr. Dvorkovitz and Councillor Walker, both gentlemen briefly responding, and expressing their pleasure at being invited to that enjoyable convivial gathering. After the health of the Chairman had been enthusiastically honoured there was more music and the evening's entertainment wound up as the toast list had begun—with the singing of the National Anthem.

* * *

In the Hanoverian Fields.—The Gewerkschaft Norddeutschland Co., operating in the Hanover oil fields, has struck oil in its well No. 5 at Steinförde at a depth of 176 metres. The first borehole is still yielding over 20 barrels of crude oil per day. The prices for contract boring being now expected to decline, the company intends to cease to do its own drillings and have their wells drilled by boring contractors. The company has taken over all the assets of the Norddeutsche Erdoelwerke Co., which latter company is going to be wound up.

THE THIRD INTERNATIONAL PETROLEUM CONGRESS.

THE GENERAL PROGRAMME.

The arrangements for the holding of the third International Petroleum Congress at Bucarest, Roumania, during next September, are being pushed rapidly forward.

The committee at work is sparing no trouble in order to make the Congress as widely known and as representative as possible, and already an outline of the general programme has been agreed upon. There are to be three sections, and these will embrace the following important subjects:—

Section I.

GEOLOGY. EXPLORATION. EXPLOITATION.

Geology.

Origin of petroleum. General geology of petroliferous regions. Migration of petroleum. Deposits of petroleum and other bituminous substances.

Exploration.

Prospecting and exploration. Surface indications. Deep explorations by shafts or borings.

Exploitation.

Hand wells and borings. Methods of execution. Distance to maintain between boreholes with a view to a maximum output. Methods of extraction. Question of casing with a view to shutting off water in the strata traversed. Importance of casing and of means employed to that end. Storage and transport. Use of electricity. Utilisation of gas. Fires—prevention and means for extinguishing. Industrial book-keeping. Amortisation of initial cost of installation. General statistics of extraction.

Section II.

CHEMISTRY AND TECHNOLOGY OF PETROLEUM.

Physical and chemical data on the nature and composition of crude petroleum oils.

Manner of differentiating petroleum oils of various districts according to their physical and chemical characteristics.

Method of Analysis.

Fixing of uniform standards for classifying and analysing the products of petroleum.

Processes of Distillation.

Distillation under diminishing pressure. Distillation by direct heat. Distillation with the aid of steam. Destructive (cracking) distillation. Periodical and continuous distillation. Comparative data on the properties of the products by different methods of distillation.

Benzine rectifying apparatus. Apparatus for regulating the pressure and output of vapours.

Method of refining and the utilisation of petroleum products as fuel, as illuminants, as motive power and as lubricants.

Gasification and other applications of petroleum products.

Carburettors for kerosene and various systems of petroleum lamps. Petroleum lamps for incandescent lighting.

Testing Apparatus.

Method for recovering the sulphuric acid and soda used in refining.

Installations for transport, storage and distribution pipe lines, tank steamers, tanks.

Section III.

LEGISLATION AND TRADE.

Various mining laws relating to the petroleum industry.

The customs tariff adopted by various countries in regard to petroleum and its products.

Rates for transport in force in various countries.

Various regulations relating to storage, transport and distribution of petroleum and its products.

The determination of units of price and measures which could be adopted in each country side by side with the local quotations.

Sanitary regulations for the transport, storage and use of petroleum and its products.

The advantages of an international understanding in regard to these regulations.

Together with the programme, the Roumanian Commissioners publish the resolutions passed by the preceding Congress at Liége, of which the following are the more important:—

Mr. Goulichambaroff, official delegate of the Russian Government, proposed:—(1) to institute a general control of illuminating oils; (2) to adopt, for transactions and statistics concerning petroleum products, units of weight instead of measures of capacity; (3) to request the representatives of the various petroleum producing countries to supply to the bureau of the Congress the characteristics of the products manufactured in their countries; (4) to unify the statistics of the foreign trade for all products of the petroleum industry.

Mr. Alimanestianu, official delegate of the Roumanian Government, proposed:—(1) to form a permanent international commission with the object to study and investigate of a more profitable utilisation of petroleum residuals; (2) to elect a new central committee, which will include six members for each country, half of this number being elected by the Congress and the other half to be nominated later by each country.

Mr. Neuburger proposed to use, as an experiment, fluoresceine or some other analogous substance for the study of the movement of underground waters, natural or artificially introduced into the petroliferous strata.

Mr. Syroczynski proposed that the statistics of production in different countrles shall be on a uniform basis in regard to, for example, the number of productive boreholes, of working days, etc.

Mr. Mrazec proposed a resolution to entrust to an international commission to draw up the programme of observations to be carried out during the boring of wells and their exploitation, so that these records could be utilised, whenever possible, for the purpose of establishing a general classification of deposits, etc.

Messrs. Berger, Edeleanu, and Krutwig proposed to form a commission with the object of studying the adoption of uniform methods of analysis of petroleum products; a commission which, in their opinion, should remain independent of the international commission for regulating the illuminating oil trade.

Mr. Forestier proposed that specialists in the petroleum industry should study the best methods of impregnating roads with bituminous substances.

Mr. de Monzie, official delegate of the French Government, expressed, in the name of all the delegates of the countries represented, the wish that an international conference should be organised by all the countries interested as producers or consumers of petroleum, with a view to establishing a uniform flash point for the admission of refined oil to customs, with reservations, if possible, for the colonies.

◆

BAKU PRODUCTION DURING 1906.

With the publication of the figures of the December oil production at the Baku fields, the exact details of the output for 1906 are available. These shew that the total production of crude oil at the Baku fields during the past year amounted to 446,162,573 poods. This compares with production of previous years as under:—

	Poods.
1900	600,700,000
1901	671,700,000
1902	636,800,000
1903	597,300,000
1904	615,300,000
1905	410,300,000
1906	446,100,000

The production of the leading firms in 1906 compared to the two preceding years was as under:—

	1906.	1905.	1904.
Nobel Bros.	53,755,000	47,585,000	74,892,000
Caspian and Black Sea Society	29,628,000	26,415,000	53,358,000
Baku Naphtha Co.	25,388,000	23,937,000	26,297,000
Caspian Society	24,883,000	20,142,000	34,488,000
Moscow-Caucasian Co.	23,528,000	24,856,000	20,033,000
Mantascheff and Co.	23,172,000	26,220,000	49,256,000
Pitoeff and Co.	13,882,200	10,491,000	10,479,000
Zoubaloff	13,685,000	14,386,000	22,340,000
Aramazd Co.	13,084,000	9,108,000	16,733,000
Assadulaeff	12,941,000	7,856,000	8,549,000
Mirzoeff Bros.	12,923,000	10,177,000	16,273,000
Russian Naphtha Co.	12,501,000	11,802,000	12,416,000
Baku Russian Petroleum Co., Ltd.	11,526,000	15,264,000	26,027,000
Nagieff	10,661,000	12,328,000	11,178,000
Russian Petroleum and Liquid Fuel Co., Ltd.	10,488,000	13,022,000	28,652,000
Schibaieff Petroleum Co., Ltd.	9,634,000	10,333,000	14,917,000
Naftalan Co.	9,208,000	7,307,000	11,450,000
Ter Akopoff Co.	7,594,000	4,543,000	8,758,000
Bibi-Eybat Petroleum Co., Ltd.	7,588,000	8,848,000	12,002,000
Shikhovo Co.	6,614,000	4,324,000	3,150,000
Neft Co. (late Tumaeff and Co.)	6,471,000	4,888,000	9,330,000
European Petroleum Co., Ltd.	5,013,000	7,000,000	11,932,000
Tiflis Co.	5,007,000	5,593,000	5,005,000
Kalantaroff and Co.	4,943,000	6,582,000	9,208,000
Kavkaz Co.	3,842,000	2,761,000	4,119,000

MESSRS. CHARLES GRIFFIN AND CO.'S RECENT PUBLICATIONS.

We doubt if there is any publishing firm in the world that has paid such due regard to the ever increasing importance of the petroleum industry and the publication of handbooks as Messrs. Charles Griffin and Co., Ltd., Exeter Street, Strand, W.C. From the earliest times when the petroleum trade began to assume commercial proportions, we have been accustomed to see the literature dealing with various branches of it franked with the name of this enterprising publishing house, and therefore it is a matter about which no surprise will be occasioned to learn that for the production of the two most recent treatises upon petroleum, Messrs. Charles Griffin and Co., Ltd., are as usual responsible.

The first work to which we would refer is that entitled "Petroleum and its products," this being a second edition of Sir Boverton Redwood's well-known treatise. Since the author placed his valuable two-volume work before those interested in the petroleum industry, the march of progress has indeed been great. In the production, refining and distribution of petroleum, the intervening time has wrought changes, a remark which also applies to the application of the commercial products of petroleum, and so the necessity arose for a complete revision of the whole work.

This has now been carried out in an admirable manner, and though, as is only to be expected, much of the technical aspect of the industry has necessarily been omitted owing to the limits of space, it is very pleasing to find that the numerous additions which have been made are of such value to the student as will more than compensate for the condensation which has been inevitable.

The statistical data as well as the numerous descriptions given throughout the two volumes, shews that great care has been exercised in the compilation of the revised edition, and valuable as the first edition has proved itself, the revised and extended work which has recently left the press gives promise of being even more eagerly sought after by those who desire to acquire more than a superficial knowledge of the principles and methods in vogue in connection with the petroleum industry.

Another revised work which will form a valuable addition to any chemico-technical library, and at the same time be of direct and practical interest to those engaged in the handling of petroleum and petroleum products is the "Handbook on Petroleum," by Captain J. H. Thomson and Sir Boverton Redwood. The first edition secured such a good reception that it is unnecessary to say more than that the joint authors have, in the second edition, even improved upon their first efforts, having brought the work thoroughly up to date by including the more recent orders which have become law. The amended order in regard to the keeping of petroleum spirit for motor cars finds a prominent place among other important information with which not only the person interested in the petroleum trade but the ordinary motorist should make himself conversant. Therefore we predict for the revised edition, the success which was bestowed upon its predecessor.

CANADA'S NEW OIL FIELD.

The History of Developments upon Manitoulin Island.

Some weeks ago the London daily press published a rather belated note to the effect that oil had been discovered on Manitoulin Island. Our readers will have gathered from the past issues of the Review that oil was found upon the island some four years ago, and since that time much development work has been in progress with varying, but on the whole, satisfactory results, most of this experimental work having been carried on mainly by Mr. H. F. Slater's and Co.

Mr. Slater visited the island last year for the purpose of making a prospecting tour, and after going over the whole ground came to the conclusion that Gore Bay, Kagawongo, Burpee, Campbell, Billings and Allan, along with other outlying townships, from the geographical situation, comprised as good a situation for an oil prospector as could be found in the Province, and with that belief immediately set about to drill, having so far drilled five wells. The first well at Providence Bay did not discover oil, but Mr. Slater does not by any means think that oil is not in that vicinity, as it may be in just as large quantities as anywhere else in close proximity to where they drilled there, but as he was experimenting in an entirely new territory, he made up his mind to drill no more than one well in any vicinity unless he found oil production, and consequently in August last moved to the township of Gordon, where, after drilling for upwards of 600 feet, he found a considerable quantity of gas but no oil. Calculating from this that he was not far from the oil bed on one side or the other of an anticlinal, he moved the drilling rig easterly and northerly to Gore Bay, and drilled a well on the lot of E. C. Jackson.

At a depth of 390 feet a strong flow of gas was encountered, and at 420 feet the hopes of the drillers were realised, when a good shewing of oil came in. Continuing their operations to a depth of 440 feet the production became greater, and it was decided to shoot the well, this being done about the end of September. The result of this shot was in doubt for several days until the rock which filled the hole could be taken out, after which, however, a good flow of oil came in, and this well is beyond doubt a good paying producer.

Mr. Slater's next move was westernly about 250 yards. Gas was encountered here a little earlier and oil at about the same depth, but unfortunately the drillers, at a depth of about 430 feet, lost their drills and sinker. A fishing expedition was in order for some time, but this was unsuccessful. However, the well was different. Before the drillers had been three days fishing for the drill, the oil commenced to fill up in the well at the rate of 100 feet a day, and at the end of four days was overflowing in a large stream. The well could not be shot on account of the drill outfit being still in it, but the oil has continued to flow over ever since, and it is no doubt an extra fine paying well; a pump having been inserted one afternoon, over 30 barrels were pumped out inside of 30 hours, and the well is now full and overflowing.

The good news to the people of Manitoulin travelled very fast, and before many days after the Johnson well began to overflow, oil men from Chicago, Pittsburg, Toledo, West Virginia, Petrolia, and many other places came to see what they realised to be the greatest oil field of the future in Ontario.

Within two weeks every available acre of land within a radius of 30 miles was under oil lease to one company or another with the promise of early development on the part of the companies procuring the leases, Messrs. Van Vleck and Co., of Toledo, getting a large tract of territory in the townships of Billings and Allan, determined not to wait until spring before commencing operations, and immediately set about to get in their drilling outfit which had been put in order and drilling commenced a fortnight ago, on the ranch of Jonathan Lehman about five miles from Kagawongo.

The other companies securing leases will not commence development until next April or May, but Mr. Slater after the excellent success he has had from the wells referred to, has determined to drill all winter if possible, and has never ceased operations.

His next well was on the lot of Robert Brett, also within the town limits and some distance from any of the other wells in town. In this well a larger flow of gas was struck, but they determined to make a deep well out of this to ascertain the prospect farther down, and have continual drilling until now at a depth of 530 feet, they have an overflowing well which promises to be the best one drilled on the island. The oil and gas have continued flowing for some weeks. Drilling will be continued until a depth of 600 or 700 feet has been reached, and the well will then be shot. From present indications it is confidently believed this will surpass all previous anticipations of oil production on the Manitoulin Island.

The field is, of course, as yet in its infancy, but enough oil has been found to warrant the belief that another Petrolia is waiting development. It is Mr. Slater's intention to bring in a large number of other drilling rigs early in the spring and thoroughly develop and prospect the field, having secured a large portion of the most desirable territory between West Bay and Silverwater—a distance extending over 25 miles in width and 50 miles in length.

The wells so far drilled are eight inches in diameter, and usually require from 8 to 20 feet of casing. The first rock encountered is what is known as the Niagara limestone, and this is the prevailing rock at a depth of about 315 feet, then about 40 or 50 feet of Utica shale, and after this the Trenton limestone in which the oil and gas are found.

As to the quality of oil it has been found by careful analysis to more nearly compare with the Pennsylvania oil than any other Canadian oil—a fact of considerable importance.

The cost of drilling is comparatively small. An ordinary well with drive pipe and casing costs only $500, and when this is compared with the cost of drilling wells to a depth of from 1,000 to 1,500 feet with the drive pipe and casing alone costing from $300 to $700, the advantages of the Manitoulin oil fields are easily apparent.

The shipping facilities are most excellent. The oil from any part in the vicinity will gravitate through pipes to the lakes or bays which are easily accessible for tank steamers.

THE COLONIAL OIL COMPANY.

The statutory meeting of the Colonial Oil Syndicate, Ltd., was held last week at the offices, Salisbury House, E.C., Mr. George Macdonald presiding.—The Chairman stated that the syndicate had one clear year from September 27th, 1906, in which to exercise the option acquired from the West African Mahogany Petroleum and Gold Co., and to form a larger company in accordance with the terms of the agreement. The report received from the engineers sent out to the Gold Coast to examine the property being favourable, the syndicate had decided to exercise the option, and it would be necessary for them to provide, either directly or indirectly, the necessary working capital for the larger company. With regard to value of the option, he thought it was just as valuable as the concession which was acquired by the the Tano Syndicate, and which would shortly be floated by the Société Francaise de Petrole, and he believed there would be very little difficulty in raising the £35,000 working capital. On the motion of Mr. C. H. Cooper, seconded by Mr. H. J. Brown, the directors were empowered to take such steps as they thought necessary to provide for the underwriting of the capital required for the new company.

THE BURMAH OIL COMPANY AND THE INDIAN TRADE.

The Rangoon correspondent of the *Times of India*, in a recent news dispatch to that journal, refers to the agreement which has been entered into by the Burmah Oil Co. with the Indian Government concerning the acquisition of land for the construction of a pipe line to convey the crude oil from Yenengyat to Yenangyaung, and thence to the refineries of the company situated at Syriam, near the mouth of the river. He explains that at present the oil is transported from the river to Rangoon by means of flats towed by steamers of the Irawaddy Flotilla Co., and the sum annually paid for this freightage is large though relatively reasonable in cost. Therefore, considering the great expenditure that will be incurred in the construction of the new pipe line and its many pumping stations, together with the cost of the upkeep of such a system, must be taken as a sign of the complete confidence of the Burmah Oil Co. in their properties in Upper Burmah.

On the subject of oil, the Director-General of Commercial Intelligence in his review of the trade of India, said:—"The continued decline — more than one score of rupees in 1905-06—in the fifth class of imports (oils) is due entirely to the ever-increasing demand for the mineral oils of Burma and Assam." In 1905-6, our contemporary journal's correspondent mentions that Burma exported £58,700 of kerosene, £62,170 of paraffin wax, and £109,180 of paraffin wax candles to foreign countries, while £1,976,000 worth of oil was sent to India. A high grade of white water oil is now being produced to compete with American and Russian oils, and the local industry is now in a better position than ever to secure even a firmer hold of the Indian markets.

THE SPIES PETROLEUM COMPANY, LIMITED.

A circular has been issued by the Secretary of the Spies Petroleum Co., dated 24th January, which points out that in order to provide funds for the acquisition and development of the properties referred to in the circular of the 8th November last, it became necessary to negotiate for the disposal of a portion of the unissued capital of the company. Arrangements were accordingly made with a financial group to subscribe for 60,000 shares at par.

These shares were allotted on the 12th instant, and will rank for dividend on their full nominal amount in respect of the operations of the financial year ending the 13th January, 1907.

In consideration of the subscription of these 60,000 shares, the subscribers were granted an option by the board to call the balance of the unissued capital of the company, viz., 65,000 shares at par, at any time during the currency of the financial year ending the 13th January, 1908. Any shares that may be called under this option will rank for dividend in respect of the full financial year ending the 13th January, 1908.

The directors state that before making the above arrangements, they fully considered possible alternative methods of obtaining the subscription of the above capital, but, in view of the fact that at the time the arrangements were made the company's shares were being quoted and dealt in on the Stock Exchange below par, they came to the conclusion that the method adopted was the best in the interests of the company, and they are much pleased with the results of the operation.

BATOUM PETROLEUM EXPORTS FOR 1906.

According to official statistics, the exports of petroleum products from Batoum during 1906 amounted to 32,100,000 poods, of which 22,440,000 poods were refined illuminating oil and 7,540,000 poods lubricating oils. The exports in 1906 shew a decrease against 1905 by 7,300,000 poods, and against 1904 by 47,200,000 poods.

The quantities of petroleum products delivered at Batoum from Baku in 1906 amounted to 30,270,000 poods, which is more than in 1905 by 3,000,000 poods, and less than in 1904 by 52,000,000 poods.

CONCENTRATION OF THE PETROLEUM TRADE IN GERMANY.

The Deutsch-Russische Naphtha Import Gesellschaft and the Petroleum Produkte Actien Gesellschaft have issued an official statement that they are combining their respective businesses under the title of Deutsche Petroleum Verkaufs Gesellschaft. The installations of the two concerns have been taken over by the new company. The final details of the amalgamation of the two companies will be agreed to after all business engagements now in force have been settled.

MISCELLANEA.

NEW DISTRIBUTING COMPANY IN GERMANY.

A new company for the distribution of petroleum products in Germany has been formed by Mr. Joseph Leis, well known as late representative of the Steaua Romana, at Regensburg in southern Germany, and as manager of the Petroleum Produkte Co., together with Mr. Maxime Neumann, late general manager of the Steaua Romana. The title of the company is "Deutsche Rohoel und Benzin Actien-Gesellschaf" (German Crude Oil and Benzine Co.), and its head office is at Regensburg, on the Danube. Apart from the two gentlemen mentioned above, among those interested in this company are:—The banking firm of Klopfer Bros., of Munich; Baron Otto von Freilitzsche, of Munich; Mr. Julius Kaufmann, of Munich; Mr. G. Porges, of Hamburg; and Count Otto von Schönborn-Wiesentheid, of Munich.

The company has already concluded, through the intermediary of Mr. M. Neumann, several contracts with Baku firms for the supply of petroleum products.

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MR. D. A. SUTHERLAND AND THE COMMONWEALTH OIL CORPORATION'S PROPERTIES.

We are informed by cable that Mr. D. A. Sutherland, the general manager of the Commonwealth Oil Corporation, who recently left London to make a thorough investigation of the company's properties, has now completed his inspection. His report is entirely favourable, and is confirmatory of the views previously expressed by him as to the Corporation's hopeful prospects.

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BAKU PRODUCTION DURING DECEMBER.

We are now in a position to announce that the total production of crude oil at the Baku oil fields during December amounted to 45,617,397 poods, or about 3,000,000 poods above our estimate as printed in our last issue on page 35, of which the Bebe-Aibat field produced 12,537,941 poods. The production by spouters amounted to 199,900 poods, and was all obtained at Ramany.

The production of the principal firms during the month was as under:—

	Poods.
Nobel Bros.	5,700,000
Caspian and Black Sea Society	3,200,000
Caspian Society	2,600,000
Mantacheff and Co.	2,400,000
Baku Naphtha Co.	2,300,000
Pitoeff and Co.	2,100,000
Moscow-Caucasian Co.	2,000,000
Mirzoeff Bros.	1,400,000
Aramazd Co.	1,400,000
Zoubaloff	1,300,000
Schibaieff and Co.	1,200,000
Baku Russian Petroleum Co., Ltd.	1,200,000
Naftalan Co.	1,000,000
Assadulaeff	1,000,000
Russian Naphtha Co.	1,000,000
Russian Petroleum and Liq. Fuel Co., Ltd.	900,000
Bibi-Eybat Petroleum Co., Ltd.	900,000
Nagieff	800,000
Shikhovo Co.	700,000
Neft Co.	700,000
European Petroleum Co., Ltd.	700,000
Ter Akopoff Co.	500,000

PRODUCTION OF CRUDE OIL IN GALICIA DURING NOVEMBER.

The following are the official figures of the production of crude oil in Galicia during November, and also the stocks at the end of the month (in tons):—

Field.	Production.	Stocks on 30th Nov.
West Galicia—		
Potok	1,294	3.648
Rogi	171	1,013
Rowne	116	104
Tarnawa-Wielopole-Zagorz	2,120	5,516
Krosno	2,898	12,125
Other West Galician fields	2,245	9,095
East Galicia—		
Boryslaw-Tustanowice	53,800	344,559
Schodnica	3,280	14,290
Urycz	1,480	11,445
Mraznica	140	699
Other East Galician fields	1,060	1,072
Total	68,584	403,596

The total stocks of crude oil declined during November by 13,327 tons. The decrease was general throughout all the fields. The deliveries of crude oil from the oil fields during November amounted to 79,064 tons.

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PETROLEUM DEVELOPMENTS IN NEW ZEALAND.

Late news from New Zealand is to the effect that the Taranaki oil fields at New Plymouth and Inglewood continue to attract increasing attention. At the Birthday well of the Taranaki Petroleum Co. recently the oil spurted out, and the burst was only controlled after a large quantity of oil had escaped. At the No. 1 bore, which is down 2,360 feet, there is reported to be many evidences of petroleum, while gases issue from the borehole. It is stated that samples have been sent to London to test the market for the crude article, but if sufficient inducement offers, and the results of the No. 2 bore are satisfactory, then steps will be taken to establish a refinery on the property. Already three derricks are erected on the company's properties at Moturoa. Of these, in No. 1 actual pumping is in progress; in No. 2 the bore is now down 1,660 feet out of 2,300 feet, which it is intended to go; and in No. 3 the steel casing is being put down, and there are already 200 feet of 8-inch and 150 feet of 9-inch casing down. At Inglewood, says the *Money Market Review's* correspondent, the Inglewood Oil and Prospecting Co. has secured boring rights in a block of 1,000 acres, besides other options, making altogether a total area of 3,700 acres. The Wellington-New Plymouth Railway runs right through the property, which, in the event of oil being found in sufficiently payable quantities, will be most favourably situated for transport, with a port of shipment at either end of the line. The Taranaki Oil and Freehold Co. hope to enter into a contract with an Australian firm for boring operations.

SEVERE EARTHQUAKE SHOCKS AT BATOUM.

Details are to hand from Batoum which go to shew that the district was visited by a number of earthquake shocks on Wednesday last. It appears that the unusually bad weather which has prevailed during the past few days at Batoum raised a terrible gale on the sea. Lake Nureigel overflowed near its junction with the sea, and part of the Batoum sea embankment and of the Alexandrovsky Park were destroyed. The local prison and the military club are surrounded by water. There is grave anxiety as to the fate of the boys' gymnasium erected by the sea. Considerable damage has been done to goods lying in open wharves. The posts carrying private electric installations have been overthrown, and everything points to the losses being very considerable.

A later report from Batoum, dated the 25th, shews that the sea is calming down, and steamers, delayed by the gale, are beginning to arrive. The loading of ships in the ports has been resumed, and the water in the lake is falling. The people who were driven out of the flooded houses are now returning, but the houses near the lake are still under water. The trains are arriving much overdue.

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IMPORTANT INNOVATION IN THE RUSSIAN EXPORT TRADE.

An experiment is being made in the Batoum petroleum export trade, which may lead to very important results. A special barque has been fitted up for carrying kerosene in bulk to the nearest Turkish ports, where it is sold straight from the vessel to the consumers, who buy it eagerly in view of the much lower prices compared to oil sold in cases. At Trebizond, for instance, tins are sold at 105—110 copecs each, whilst net from the ship the price is only 80 - 85 copecs. This mode of shipment will probably experience considerable extensions in the near future.

GALICIAN GLEANINGS.

A Prolific Spouter.

Petroleum, of Berlin, has received telegraphic information of the strike of an extraordinary prolific spouter at Tustanowice. The well belongs to the Urycz Petroleum Co., and yields approximately 300 tons of crude oil per 24 hours. This is the largest spouter ever obtained at Tustanowice.

Activity in the Fields.

The Actien Gesellschaft fuer Naphta-Industrie is now engaged upon drilling five boreholes at Boryslaw, these having reached the following depths:—No. 5, 906 metres; No. 10, 1,063 metres; No. 17, 1,017 metres; No. 18, 1,128 metres; and No. 25, 1,053 metres. The company has also at Boryslaw five wells, all of which are producing. At Tustanowice the company has two wells drilling, of which No. 1 is now 853 metres deep, and No. 2, 480 metres, while a third well is about to be started. At Rogi this company has three wells drilling and also one well each drilling at Rowne and Rowne-Klarowice.

Crude Oil Prices.

In view of the fact that a large proportion of the production in Galicia is already under contract with the Petrolea, the price of the crude oil of the outsiders is rising continuously. Certain refineries, with a view to placing difficulties in the way of the complete reorganisation of the Petrolea, willingly buy small quantities of crude at enhanced prices, between 37½ and 40 kronen per ton. The quantities changing hands at these prices are very small, and for contracts for future delivery the price is much lower.

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FRANCE AND KEROSENE MOTORS.

The jury of the competition for motors working with illuminating oil, destined for the State Marine in France have submitted their report to the Minister of Marine. The conclusions of this report are:—That the Cazes motor shall be awarded the prize and acquired by the Admiralty. The Cazes is entitled to a prize of 1,500 francs offered by the Automobile Club of France. The report also recommends the acquisition of the Mietz and Weiss motor. These conclusions have been approved by the Ministry of Marine.

THE OPERATIONS OF THE BAKU REFINERIES.

STATISTICS FOR OCTOBER, 1906 (in poods).

I.—Manufacture of Illuminating Oils.

Distillation.

	Submitted to Distillation.			Products Received.				
	Crude.	Other Products.	Total.	Kerosene.	Residuals.	Other Products.	Loss.	Fuel used.
October	27,114,343	240,890	27,355,233	7,883,104	17,753,604	1,100,639	617,886	769,217

Refining.

	Submitted to Refining.			Refined Products Obtained.				Chemicals used.	
	Kerosene	Other Distillates.	Total.	Kerosene.	Other Products.	Total.	Loss in Refining.	Acid.	Soda.
October	7,908,877	46,533	7,955,410	7,724,833	44,522	7,768,355	187,055	38,192	13,788

II.—Manufacture of Lubricating Oils.

Distillates Received.

	Machine Oil.	Spindle Oil.	Cylinder Oil.	Goudron.	Solar Distillates.	Residuals.	Other Distillates.	Loss in Distilling.	Fuel used.
October	1,184,078	85,573	45,595	796,639	867,168	1,440,075	147,916	396,064	561,865

Refined Products Received.

	Spindle Oil.	Machine Oil.	Cylinder Oil.	Loss in Refining.	Chemicals used.	
					Acid.	Soda.
October	123,272	1,171,149	37,575	178,539	31,065	5,217

The output of benzine distillates amounted to 64,421 poods. The output of refined benzine was 24,685 poods.

AMERICAN OIL NOTES.

Manufacturing Firms to Drill.—A number of the heads of local manufactories in Iola, Kansas, have decided among themselves to drill a deep test in the district; this is to go down 3,000 feet if oil is not struck before that depth.

Studying American Methods.—Mr. Teisuke Watanabe, of Kasiwasaki, Echigo, Japan, is at present touring the petroleum producing districts of America, the main object of the trip being to make himself conversant with the uses of compressed air in working wells.

Progress Prevented.—It is stated upon the authority of the general manager of the Prairie Oil and Gas Co. that the Standard Oil Co. is to make no more extensions to its pipe lines in Indian Territory and Oklahoma, under the new and absurd rules recently laid down by the Secretary of the Interior.

California's Harbours.—The California Promotion Committee held a conference a few weeks ago at San Diego, at which the question of the necessity for the improving of the Californian harbours was discussed by many representatives of the petroleum trade. Several resolutions were passed urging various improvements.

Texas Oil Requirements.—Comparing the monthly oil requirements in the Gulf Coast districts, and the monthly average production for the pas year, it is seen that each month the production has fallen short of the requirements by about 1,000,000 barrels. The total stocks at the beginning of last year in the fields amounted to about 20,000,000 barrels; at the beginning of last month they were 8,000,000 barrels.

Field Extensions at Tilbury.—News reaches us of two important strikes in connection with field operations at Tilbury—important because the new wells extend the limits of producing territory a considerable distance. One of the wells is located six miles north of Tilbury, and the other lies to the south of the field. The latter is a shallow well, being 260 feet deep, while the former has been drilled to a depth of 1,200 feet.

A Record Gasser.—Records in the way of natural gas wells are constantly being established, and the latest one is located at Pane, Pa., at present blowing gas into the air at the rate of several millions of cubic feet per day. It is said that the roar of the escaping gas can be heard for miles round. This well is not far from the gusher which was drilled last September, when 80,000,000 cubic feet of gas were lost before the well could be got under control.

Texas Well Averages.—The average daily output of the Texas wells in December was 35·57 barrels. The wells in the Matagorda district produced the smallest quantities—ten barrels each per day—while the wells at Saratoga were on the average the most productive, their daily output being 56·39 barrels each. The Sour Lake wells yielded 49·87 barrels each per day, while those of Spindle Top produced on an average 41·45 barrels each per day. During December 108 wells were being operated in the Saratoga and Sour Lake fields, but at Batson no less than 293 wells were producing, though their daily average was only about 20 barrels.

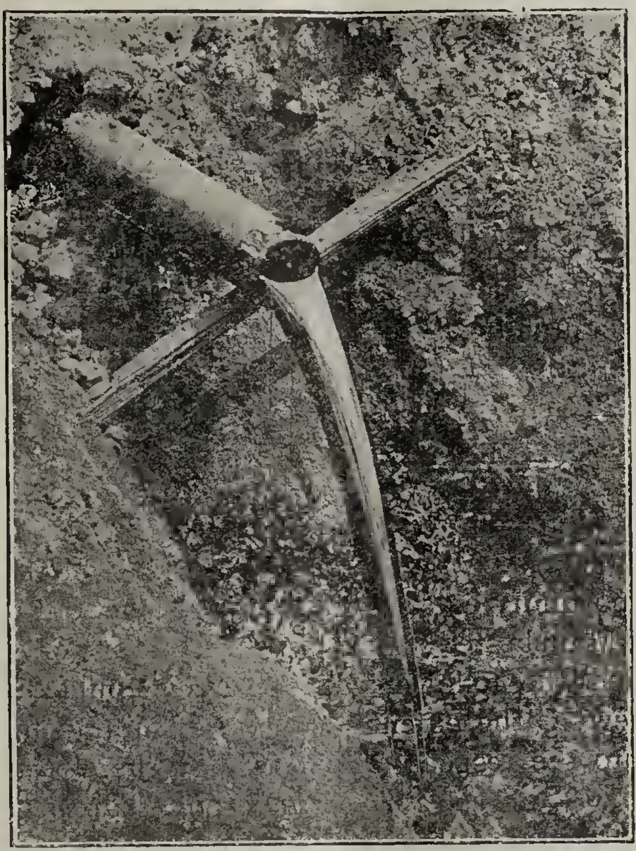
Alberta Oil Developments.—The *Oil City Derrick* states that as a result of an inspection of the Alberta field by Mr. Eugene Coste, of Toronto, that gentleman remarks that so far no oil in any quantity has been developed, for the reason that drilling operations have not been conducted on a sufficiently extensive scale to thoroughly test the territory. When this is done, he believes that two kinds of oil will be found—fuel oil and the more valuable lighter petroleum for refining purposes. The Rocky Mountain Development Co. and the Western Oil and Coal Consolidated Co. are working in the southern part of Alberta, but have as yet not reached oil in commercial quantities.

Prominent Oil Man's Death.—The death is announced of Mr. R. M. Jennings, the general manager of the Pure Oil Co. In addition to his connection with the Pure Oil Co., Mr. Jennings was the manager of the Kanawa Oil Co., a concern having large holdings in Indian Territory.

Developments in Kentucky during 1906.—No less than nine distinct fields were developed in Kentucky during 1906. These included those of Wayne, Knox, Whiteley, Cumberland, Estill, Bath, Rowan and Floyd counties, while in Tennessee only one field—that in Fentress county—was developed.

New Petroleum Company.—A new petroleum company has been formed to work the oil deposits that have been discovered in Jefferson county, Georgia, near Louisville. The oil is stated to closely resemble the Pennsylvanian product, being of very high grade. The new company is known as the Georgia Petroleum Co.

The Illinois Field.—In spite of the wretched condition of the roads in Crawford county just now as a consequence of the heavy winter rains, much activity is noticeable everywhere, and quite recently a number of remarkable wells have been brought in. Wells with a production of 100 barrels per day are now a common occurrence.



A Self-Flowing Well in Illinois.

Oil Boom in the Pecos Valley.—The statements made by Dr. C. F. Z. Caracristi regarding the oil situation in the Trans-Pecos country has already borne fruit, for Captain Haase, a well-known West Virginian and Colorada oil man, has secured control of 12,000 acres upon which petroleum developments are to be commenced as soon as the weather permits.

The Westfield Territory.—The first well drilled in the Westfield territory of Pennsylvania has turned out a complete failure. The well was drilled to a depth of over 1,000 feet, but no trace of oil was seen, and so operations were stopped and the well abandoned. It has, however, been decided not to abandon the field, as many oil men are of opinion that good wells are to be developed at Westfield.

The Norton Oil Company.—Several important extensions have recently been made to the territory belonging to the Norton Oil Co.—a concern which has been operating extensively for some time in Delaware county. It has just acquired possession of the Production Oil and Gas Co.'s property in Liberty township, while the property of the Empire Oil Co. and the leases of the Cascaret Oil Co. has also been taken over.

The Glenn Pool.—The Glenn pool in the Creek Nation, east of Tulsa, Indian Territory, continues to be the large factor in the production of the Mid-Continental fields. It has so far developed a producing capacity of 30,000 barrels per day. In view of the entry of Texas interests into the field which will enable the present increasing congestion to be relieved, there has been an increase in field work, and during December no less than 234 new wells were completed with almost 15,000 barrels of new production.

The Pure Oil Company's New Line.—Commenting upon the Pure Oil Co.'s new pipe line which is to run from the southern part of Pennsylvania to the company's refinery at Philadelphia, a Harrisburg correspondent states that an application has already been filed for its construction. According to law, the route shewing the land traversed has had to be filed with the application, and this is contained in a bound book more than two feet long, and containing more than 100 blue prints.

Concerning Beaumont and the Oil Industry.—As the centre of the Texas oil industry the advantages of Beaumont are many, as was explained a few days ago by the editor of the *Oil Investors' Journal* to the members of the Beaumont Chamber of Commerce. In the Texas oil industry since the commencement of the present century, no less than $50,000,000 has been invested, one-third of this amount having been sunk in wells. Of the oil produced, this has been sold at about $46,000,000 for the producer.

THE CUSTOMS AUTHORITIES AND THE BOARD OF TRADE.

Startling Discrepancies in the Petroleum Returns.

At the suggestion of several of our readers, we have since our last issue made a very careful search into the figures of the imports of petroleum products into the United Kingdom for the past year as published in every issue of the Review, our object being to see by what means the Statistical Department of the Board of Trade arrive at their various totals of petroleum imports. For the past year, for instance, the Board of Trade figures differ in a startling manner from the official list of imports which are regularly furnished to us by the Custom's authorities, and therefore we have felt that the better thing to do was to verify the published details given in our classified list of petroleum imports with the originals supplied by the Custom's authorities. The official figures of the Custom's department must naturally be taken as being correct rather than that those of the Board of Trade should be relied upon as authoritative, since that department must necessarily have to go to the Customs in order to obtain the data for the compilation of its statistics.

The result of our investigations has been that we have conclusive evidence that the data published by the Board of Trade cannot in the least be relied upon as regards this country's imports of illuminating oil, though their details of the shipments of other petroleum products to the United Kingdom for the past year are substantially correct.

But in the statistics of illuminating oil, the Board of Trade are absolutely "at sea"; in fact, their monthly export statistics seem to have been arrived at by some mysterious calculation of the purely imaginary. The result of this has been that the Board of Trade give a total importation of illuminating oils to this country of nearly 7,000,000 gallons in excess of that recorded in the official figures of the Customs authorities.

So that our readers may see to what extent the Board of Trade has ignored the truth, we herewith give the actual imports of illuminating oil into this country during 1906, and publish alongside the misleading figures of the Board of Trade. These respective sets of figures are as follow:—

Month.	Gallons of Illuminating Oil imported, according to our published figures and those of the Custom's Authorities.	The Board of Trade's Statistics,
January	**11,478,201**	10,199,885
February	**10,102,596**	12,678,918
March	**9,177,660**	11,658,584
April	**17,473,170**	16,162,278
May	**14,297,350**	12,627,824
June	**7,539,945**	9,152,255
July	**13,877,450**	14,606,790
August	**14,536,450**	14,510,515
September	**10,711,178**	10,268,322
October	**14,888,535**	15,767,791
November	**10,127,170**	12,879,041
December	**10,638,150**	10,729,276
Total	**144,847,855**	151,241,479

The above revelations will, we venture to think, cause many to pause in future before they take the Board of Trade statistics as even approximately correct.

THE PETROLEUM TRADE OF MANCHESTER & LIVERPOOL DURING 1906.

In order to give our readers an opportunity of comparing the petroleum trade statistics of Manchester with those of Liverpool, we have compiled the following tables (taken from our import lists) shewing the extent of the imports of petroleum products into the respective ports during 1906.

Until two or three years ago, it will be remembered that the petroleum import trade of Manchester was almost insignificant, but thanks to the growing popularity of the Manchester Ship Canal as an ocean waterway, many of the oil tankers that used to discharge at Liverpool now proceed up the Canal to Old Trafford, where their bulk cargoes can be handled as expeditiously as at any oil port in the world.

It is, therefore, from Manchester and not from Liverpool that the vast population of Lancashire and Yorkshire is now supplied with its petroleum products. It will be seen that the year's imports to Liverpool were several million gallons behind those of Manchester. The figures are as under:—

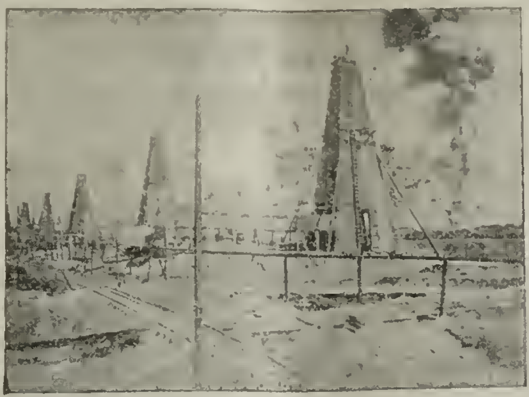
Manchester.

	Illuminating.	Lubricating.	Gas Oil.	Benzine.	Residuals.	Other Products.	Grand total.
January	650,620	824,160	—	—	—	2,400	1,477,180
February	2,311,600	1,168,568	1,340,000	—	—	2,400	4,822,568
March	930,500	416,130	526,370	—	—	—	1,873,000
April	846,600	1,671,340	1,313,000	—	—	—	3,830,940
May	2,831,270	906,265	147,600	—	—	7,120	3,892,255
June	—	333,105	—	—	2,400	—	335,505
July	1,008,000	496,330	—	—	—	—	1,504,330
August	3,216,875	1,526,675	532,000	—	—	4,800	5,280,350
September	1,140,000	613,263	1,311,838	3,000	—	6,508	3,074,609
October	1,633,560	928,948	—	—	—	16,868	2,579,376
November	1,374,550	372,500	—	—	—	7,200	1,754,250
December	3,273,800	785,910	—	—	—	9,400	4,069,110
	19,217,375	10,043,194	5,170,808	3,000	2,400	56,696	34,493,473

Liverpool.

	Illuminating.	Lubricating.	Gas Oil.	Benzine.	Residuals.	Other Products.	Grand Total.
January	834,500	1,051,880	395,900	70,800	32,400	32,410	2,417,890
February	4,100	1,656,620	—	48,970	10,000	5,160	1,724,850
March	1,721,650	1,450,590	217,000	103,990	—	710,400	4,203,630
April	—	1,232,510	—	—	—	8,070	1,240,580
May	1,310,860	837,210	62,500	23,270	10,000	14,400	2,258,240
June	1,942,570	1,431,970	1,031,000	8,000	34,280	32,120	4,479,940
July	6,100	519,280	—	—	2,000	11,000	538,380
August	613,050	717,930	387,020	40,470	—	11,717	1,770,187
September	759,100	969,884	—	—	35,020	10,900	1,774,904
October	45,020	1,141,889	557,310	57,800	24,000	484,376	2,310,395
November	830,810	1,301,290	583,740	39,950	5,800	57,100	2,818,690
December	1,244,450	816,560	956,030	15,500	24,400	22,850	3,079,790
	9,312,210	13,127,613	4,190,500	408,750	177,900	1,400,503	28,617,476

RUSSIAN .. AND ROUMANIAN .. NOTES.



A New Company has been formed in Tiflis for the acquisition and exploitation of plot No. 70 at Saboontchi, Baku.

Strike at Apostolache.—A well of Messrs. Eberhard, Marchena and Co., at Apostolache, has reached the oil stratum, and yields 40 tons of crude oil per day.

Kerosene Prices at Saratoff.—According to a telegraphic report from Saratoff, Nobel Bros. and the other large petroleum distributors have raised the price of kerosene there by 29 copecs per pood, bringing it up to 120 to 121 copecs.

To Promote Exports to England.—The *Bursa* mentions the proposed formation of an Anglo-Roumanian company for the export of Roumanian petroleum products to England. The capital is to be £250,000, of which £160,000 will be issued immediately.

More Unrest at Baku.—A strike has broken out on the property of the Shikhovo Co., at Baku. The cause is a demand by the men for increased pay and extra allowances. A fresh strike is also expected on the property of the Kavkaz Co.

The Management of the Russian Railways demanded from the private owners of tank waggons to fit up their tank waggons with hand brakes. After January of this year they will not allow tank waggons without brakes to run on the railways. The cost of fitting a brake to a tank waggon is from 200 to 250 roubles.

Belgian Capital in Roumania.—A company has been formed in Antwerp for the purpose of acquiring and exploiting the "Naphta" plot at Bustenari, Roumania. The capital is 1,600,000 francs, of which 930,000 francs has been subscribed and paid up to the extent of 25 per cent. The directors are authorised to increase the capital to 2,000,000 francs.

Jaroslav Stocks.—On November 1st, 1906, the stock of residuals at Jaroslav, on the Upper Volga, amounted to 16,061,000 poods, and of kerosene 2,175,000 poods. The largest part of these stocks belonged to Nobel Bros. and the Mazout, namely: Nobel, 8,975,000 poods residuals and 180,000 poods kerosene; Mazout Co., 2,666,000 poods residuals and 1,005 000 poods kerosene.

The Berekei Government Plots.—The Russian Government has granted a further extension of time, from two to four years, to concessionnaires of plots of Government petroliferous lands at Berekei, for commencing the production of petroleum. The concessionaire taking advantage of this extension, has to commence drilling before the end of the fifth year from the date of the granting of the concession, failing which the concessions will be forfeited even before the extension of time has expired.

Benzine Prices in Moscow.—There is very keen competition now in progress in Moscow between sellers of benzine, and prices have been brought down to a minimum. There are no forward sales, but the spot price is 1·80 roubles per pood in barrels. The cost of the benzine to the sellers is 1·90 rouble per pood made up as follows:—Cost of benzine distilate 46 copecs per pood, barrels about 30 copecs, carriage from Grosny to Moscow 55 copecs, and excise duty 60 copecs: total, 1 rouble 91 copecs per pood. Thus on each pood of benzine sold the sellers lose 10 copecs.

Baku Average Spot Prices.—The following were the average spot prices of petroleum products at Baku for November, as worked out by the Baku Exchange Committee:—

	Copecs.
Light Bebe-Aibat crude oil	22·66
,, Balakhany ,, ,, ...	22·91
Heavy Bebe-Aibat ,, ,, ...	23·94
Residuals in ships	24·18
Kerosene in waggons	26·08

The Baku-Batoum Pipe Line.—According to a report from Tiflis, a Commission has just been formed to formally take over from the builders the kerosene pipe line from Baku to Batoum, which, as our readers are aware, has been completed.

English Capital for Roumania.—It is reported that the Hollandsch-Rumeensche Petroleum Maatschappij, a Dutch company owning petroleum properties in Roumania are pushing forward negotiations with a group of English capitalists for the sale of their properties to the latter.

A New Boring System.—Mr. Beldiman, a son of the Roumanian Minister in Berlin, has invented a system of boring which is said to be both simple and original, and which enables to replace the derrick and all its interior installations by a simple apparatus worked by water-power. The well-known engineering firm of A. Borsig, of Berlin, has taken up this invention with a view to testing and eventually exploiting the same.

The Question of Housing Workmen.—By order of the Viceroy of the Caucasus, a Commission has been formed at Baku under the presidency of the Chief Factory Inspector for the Baku district, and including a representative of the council of the Baku Petroleum Association, to consider the question of the acquisition from owners of land in the localities of Bulibuli and Ramany of an area of 840 acres, at a price to be agreed upon, for the purpose of erecting workmen's villages.

Baku Refinery Stocks.—The stocks of oils at the Baku refineries on the 1st December, 1906, were;—Crude oil, 17,711,117 poods; illuminating oil, 5,422,558 poods; lubricating oils, 1,079,159 poods; residuals, 23,223,206 poods; other products, 310,815 poods: total, 47,746,855 poods. The total shews an increase against the 1st November of about 27,000,000 poods, of which 10,000,000 poods represents the increase in the crude oil stocks, 16,000,000 poods in residuals, and about 1,000,000 poods in kerosene.

Czaritzin Oil Advances.—In view of the almost complete exhaustion of stocks of illuminating oil at the principal Volga centres and the necessity to supply the markets with oils brought up from Baku *via* Petrovsk and Odessa, the large distributing firms have increased their prices to 1·20 roubles per pood, delivered at Czaritzin. The latest quotations at Czaritzin were 90–91 copecs; the advance is consequently an enormous one, particularly if we bear in mind that 60 copecs per pood represents the excise duty.

The Arnheemsche Petroleum Co.—A Dutch company operating in Roumania, completed their financial year ended 12th July, 1906, without any profits. The Directors in their report attribute the unfavourable results to the fact that the three new wells completed during the year have not proved successful, having contributed to the production only some 960 tons. The total production during the financial year 1905-6 was 15,581 tons against 17,951 tons in the financial year 1904-5, and 7,228 tons in 1903-4.

The Consolidated Dutch-Roumanian Petroleum Co.—The formation of the Consolidated Romano-Dutch Petroleum Co., mentioned in the Review some time ago, is now officially confirmed. The founders are the Nederlandsche Handel Maatschappij, an important banking firm of Amsterdam, together with the Royal Dutch Petroleum Co. and other Dutch capitalists, including those interested in the International Petroleum Co. The new company has a capital of 12,000,000 florins, and will take over the Roumanian properties acquired for their account by Mr. Pleyte (Moreni Co., Astra Refinery, etc.), and will also make fresh acquisitions of petroliferous lands. The directors of the Consolidated Dutch-Roumanian Petroleum Co. are: H. London, H. W. A. Deterding and A. J. Cohen Stuart.

LATEST QUOTATIONS OF PETROLEUM SHARES.

ENGLISH COMPANIES.

This list is restricted to companies who have paid dividends or who are producers.

Company	Capital Paid Up.	Value of Shares.	Latest Prices.
Assam Oil	£205,000	£1	⅝-¾
Baku Russian Petroleum ..	£750,000 Ord.	£1	3/0-3/6
,, ,, ..	£650,000 5½% Pref.	£1	5/6-6/0
Bibi-Eybat Petroleum Co. ..			8/9-/10
Californian Oilfields	£250,000 Ord.	£1	5⅜-5⅝
Commonwealth Oil Co. Pref	10/- paid up		½-⅝ pm.
,, ,, Def..	£1 fully paid		2½-2⅝
European Petroleum	£550,000 Pref.	£1	2/0-3/0
,, ,, ...	£550,000 Ord.	£1	0/6-1/6
,, ,, ...	£376,000 Deb.	£100	82-85
Russian Pet. & Liquid Fuel ..	£500,000 6½% Pref.	£1	10/0-11/0
,, ,, ...	£600,000 Ord.	£1	8/6 9/6
Schibaieff Petroleum ..	£575,000 6% Pref.	£5	2¼-2½
,, ,, ...	£575,000 Ord.	£1	6/0-7/0
Shell Transport & Trading ..	£2,000,000	£1	31/0-32/0
,, ,, ,, ..	£1,000,000 Pref.	£10	9⅝-9⅞
Spies Petroleum Company ..	£312,500	10s.	11/0-12/0

RUSSIAN COMPANIES.

Company	Nom. Value in Roubles.	Quotations on January 27th.	
		Lowest Roubles.	Highest Roubles.
Baku Naphtha Co.	100	543	546
Balakhany Naphtha Co.	250	—	—
Caspian Society	1,000	4,400	4,450
Melikoff, A. C.	250	—	—
Mirzoeff Bros.	250	—	—
Naphtha Co. "Kavkas"	250	—	—
Naphtha Trading Co., A. I. Mantacheff & Co.	250	157	159
Neft Co.	250	—	—
Nobel Bros.	5,000	10,150	10,200
,, ,, ...	250	—	—
Rops and Co. V...	250	—	—
Russian Naphtha Co.	250	170	—
Society Mazout	250	—	—
Tumaieff & Co., J. G.	250	—	—
Volga-Caspian Naphtha and Trading Co.	250	—	—
,, ,, ,, (Second Issue)	250	—	—

SCOTCH COMPANIES.

Supplied by Messrs. MACLEAN AND HENDERSON, STIRLING.

Company.	Capital Paid Up.	Value of Share.	Latest Prices.
Broxburn Oil Co., Ltd., Ord. 8½ pd	£19 ,750	£10	21½
Do. 6% Cum. Pref. ..	£100,000	£10	$12\frac{7}{16}$
Burmah Oil, Ord.	£1,100,000	£1	59s. 6d.
Do. Pref.	£250 000	£1	25s. 0d.
Dalmeny Oil Co., Ord. (7 paid) ..	£37,800	£8 10s.	£6 16s. 6d.
Do. 5% Pref. ..	£18,900	£7	93s.
Oakbank Oil Co., Ltd., Ord.			
(17s. pd. 1st issue)	£38,250	£1	43s.
Do. (17s. pd. 2nd issue)	£131,750	£1	41s. 0d.
Pumpherston Min. Oil Co., Ld., Ord.	£110,500	17s.	6⅞
(17s. paid)			12¾
Do. 6% Cum. Pref	£100,000	£10	
Tarbrax Oil Co., Ltd. Ord. (£1 pd.)	£38,350	£1	37s. 6d.
Young's Paraffin Co., Ltd., Ord. ..	£452,808	£4	77s. 6d.
Do. "B" Deb...	£150,000	£100	180½

DUTCH COMPANIES.

Company.	Latest Quotations	Former Quotations	Florins.
Arnhemsche Petroleum Mij. ..	—	—	1,000
Aurora ,, ,, (Deb. 5%)	92½	93¾	—
Campina Poiana Mij...	19	19	—
Dordtsche Petroleum Mij. (Pref.) ..	131	127	500
,, ,, ,, (Deb. 4½%)	101½	101½	1,000
Gaboes ,, ,, ...	—	—	—
Holl. Rumeensche Petroleum Mij...	35⅞	35½	1,000
Int. Rum. Pet. Mij.	105½	100½	500
Java Petroleum Mij. (Ord.) ..	—	—	1,000
,, ,, ,, (Pref.) ..	—	—	—
Koninklyke Nederl. Pet. Mij. Shares	728½	705	250-1,000
,, ,, Share certificates	728½	700½	1,000
Mœara Enim Petroleum Mij. ..	136	136⅜	100
,, ,, 1-1,000 Oblig. 5	101	100¾	250-1,000
"Moesi Ilir" Petroleum Mij. ..	—	43	—
Nederl.-Rumeensche Petroleum Mij.	16	15½	—
Nieuwe Ned. Petroleum Mij. And...	—	—	1,000
Oliebronnen in Hannover Mij. ..	147½	147½	—
,, ,, (Deb. 5 %)	95	98	—
Panolan Maatschappij Cert. ..	366	350	—
Perlak Petrol. Mij. (6% cum.pr.A.) ..	162½	154⅞	1,000
,, ,, (Common) ..	142¾	134½	—
Sumatra-Palembang Petroleum Mij	81½	76⅛	50
Zuid Perlak Petrol. Mij. (Pref.) ..	123⅝	129⅜	—

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Saturday, February 2nd, 1907.

OIL IS KING.

> "A few years ago a solitary figure might have been seen daily on the shores of the Caspian Sea, worshipping a fire springing naturally from the petroleum gases in the ground. The devotee was a Parsee from India—the last of a series of priests who for more than 2,500 years had tended the sacred flame upon the spot. Round about his crumbling temple were rising greasy derricks and dingy kerosene distilleries—symbols of a fresh cult, the worship of mammon—but, absorbed in his devotion, the Parsee took no heed of the intruders, and so time passed on, and the last of the fire-worshippers died, and with him perished the flame that was older than history. And yet not so. The flickering light the Gueber priests had kept alive from the epoch of myths had only quitted the ruined temple to re-appear in a million brilliant jets throughout a region stretching for thousands of miles around Baku."

THUS wrote the popular author—Charles Marvin—in his book upon "The Regions of the Eternal Fire," after his visit to the Caucasus twenty years ago, and his remarks, viewed in the light of present day events, go far to suggest that he had something of a prophetic eye in regard to the future of the petroleum industry. But the light of the Gueber priests of the last century has spread far beyond the limits of Mr. Marvin's prophecy, for to-day it illuminates and gives heat in the utmost corners of the world. In the teeming villages of middle Russia, on the western steppes of the Rocky Mountains as well as throughout the length and breadth of the United Kingdom, the flickering flare of the fire-worshippers of old has died only to re-appear as a universal light, which for brightness, combined with strict economy, takes a place altogether by itself. In this country, where the eyes of inventors have ever been on the *qui vive* to popularise other means of illumination, where electric light and gas monopolists have been constantly busy in an endeavour to oust the pure light of the ancients, oil has held its own, and though during the past few years our total imports of illuminating oil have slightly declined, that reduction has not been so marked as the opponents of oil might have wished. Let us take figures for the past three years. During these periods the following quantities of various oil products were imported into the United Kingdom (in gallons):—

1903.	1904.	1905.	1906.
280,000,000	296,000,000	307,000,000	292,000,000

The one product, however, which has for the past few years shewn a steady decline is illuminating oil, the imports of which have been as under (in gallons):—

1903.	1904.	1905.	1906.
168,000,000	174,000,000	162,000,000	145,000,000

If these figures are taken by themselves, one is apt to draw a rather gloomy picture as to the future of the illuminating oil trade in this country, but when we take into consideration the progress of both electric light and gas, and recollect the present gigantic proportions of the illuminating oil trade in England, there is little or no reason to become pessimistic. It must also not be forgotten that the gas companies have offered great inducements to the poorer classes to use their light by providing them with prepayment meters, free cooking gas fittings, etc., which fact, coupled with the common knowledge that oil has comparatively few friends to urge its extended use, makes it really astonishing that the illuminating oil trade occupies its still high position in regard to satisfying the needs of those who love a good and cheap light.

During last year, for instance, no less than 170 tank steamers were engaged in various parts of the world carrying illuminating oil to our shores, and when these cargoes reached us, they were consumed at the rate of practically 400,000 gallons per day, among the 6,500,000 of consumers in this country. This fact alone is sufficient to shew that oil still holds its own against all comers, this being solely due to the bright and healthy light it gives, combined with its cheapness.

The economy which can be brought about by the general use of oil is very great, and last year the 6,500,000 consumers in the United Kingdom did not pay more than £4,800,000 for their oil although consumed at the rate of 400,000 gallons per day. Therefore, a sum of 15s. per family was paid by the consumers during the whole of last year for the lighting of their homes.

In strange contrast stand the lesser number of gas consumers, who according to semi-official returns, are under 5,000,000 in this country. The average annual cost of gas to them works out at £4 16s. each, for collectively they paid away £21,000,000 to the various gas undertakings. The gas companies have ever been on the alert to capture the small consumer, but whether they have succeeded, the remarks given above amply prove. The loaning of gas cookers or free gas fittings to the poorer section of the community, has perhaps done a great deal in the way of popularising gas, but since gas companies are not expected to be philanthropic organisations, it is as clear as daylight, even to the "man in the street," that the consumer must be heavily penalised somewhere, and that is generally in the poor quality of gas supplied, and the excessive charges made for it.

For the past decade or more, gas manufacturers have turned their attention to the improving of the quality of their gas, and thanks to the innovation introduced by Dr. Dvorkovitz, solar oil is now very largely used for the purposes of gas enrichment. Of this oil, no less than 56,000,000 gallons were used last year at the various gas works in order that the gas might be brought up to the standard which Parliament requires, and so if we take cognisance of this additional large quantity as a means of lighting, we shall be forced to the conclusion that to-day oil is used in this country as an illuminant to a greater extent than ever before.

Not only, therefore, has the old light of the Gueber priests been kept from perishing, but its progress, especially in present progressive age, is assuming proportions almost beyond the imagination of those who knew and worshipped the "sacred flame" in the long dead past.

It has, as Charles Marvin observed, re-appeared in a a million jets in the cities of the icy north, the strongholds of the Caucasus, the caravanserias of Persia, and the tents of Askabad and Merv, but to-day its mission holds greater sway, for in both hemispheres it supplies light and heat to countless millions. Against each and every competitor to-day more than in any period of the past, oil is king.

PRODUCTION OF ENGLISH COMPANIES IN RUSSIA.

Baku Russian Petroleum Co., Ltd.—The production for the week ended 19th January was 267,000 poods, or 4 304 tons; and for the week ended 26th January was 237,000 poods, or 3,821 tons.

Russian Petroleum and Liquid Fuel Co., Ltd.—The production for the week ended January 20th was 193,000 poods, or 3,112 tons; and for the week ended 27th January, 164,000 poods, or 2,644 tons. The production suffered during the week on account of bad weather.

Spies Petroleum Co., Ltd.—The output for the week ended 20th January was 119,520 poods, or 1,927 tons; and for the week ended 27th January, 106,225 poods, or 1,713 tons. The fallling off of the output is due to a heavy frost of four days.

The European Petroleum Co., Ltd.—The production for the week ended 20th January was 139,480 poods, or 2,249 tons; and for the week ended 27th January was 113,747 poods, or 1,834 tons.

LONDON OIL SHARE MARKET.

Friday, February 1st.

During the earlier part of the period that has elapsed since our last issue the Oil Share Group on the Stock market was exceedingly stagnant, prices being merely repetitions day after day, but during the latter, more animation has been displayed. To give Saturday, January 16th, quotations in full, Anglo-Russians stood 0-$\frac{1}{8}$, Assam Oil, $\frac{5}{8}$-$\frac{3}{4}$, Baku Ordinary 2s. 9d. to 3s. 3d., Preference 4s. 6d. to 5s. 6d., Bibi-Eybats $\frac{3}{8}$-$\frac{1}{2}$, Debentures 84-89, Californian Oilfields 5-5$\frac{1}{2}$, Refineries 1$\frac{3}{16}$-1$\frac{5}{16}$, European Petroleum Preference $\frac{1}{16}$-$\frac{3}{16}$, Debentures 79-84, Russian Ordinary 9s. 6d. to 10s. 6d., Preference 11s. to 11s. 6d., Debentures 91-94, Schibaieff Ordinary 7s. to 8s., Preference 2$\frac{1}{4}$-2$\frac{3}{4}$, Shell Transport Ordinary 30s. to 31s., Preference 9$\frac{1}{2}$-10 and Spies $\frac{9}{16}$-$\frac{5}{8}$.

The first alteration occurred on the following Friday when Californian Oilfields were in request, closing quotation being $\frac{1}{4}$ bettter at 5$\frac{1}{4}$-5$\frac{3}{4}$, a further $\frac{1}{4}$ advance was registered next day, and on Monday the price rose to 5$\frac{5}{8}$-5$\frac{7}{8}$, but some little realisation on Tuesday depressed the market and a reaction set in which finally left the quotation at 5$\frac{1}{4}$-5$\frac{3}{4}$. Russian Preference were also weaker, losing 1s. at 10s. to 11s, while Schibaieff Ordinary declined 6d. at 6s. 6d. to 7s. On the other hand Baku issues were stronger, the Ordinary at 3s. to 4s., and the Preference 5s. to 6s. On Wednesday Californian Oilfields strengthened again and closed firm at 5$\frac{1}{2}$-6, while on Thursday the only change was a drop in Russian Ordinary of 1s. per share at 8s. 6d. to 9s. 6d. At the End-January Settlement which commenced on Tuesday general charges for interest ruled somewhat lighter than at previous accounts, but about 8 per cent. to 9 per cent. was exacted to continue oil shares.

Alterations from making-up prices fixed at the Mid-Month settlement are of a somewhat irregular character, for though Baku Ordinary at 3s. 6d. rose 1s. per share, Preference 1s. 6d. at 5s. 9d., Californian Oilfields $\frac{3}{4}$ at 5, and Shell Transport Ordinary 1$\frac{1}{2}$ at 1$\frac{17}{32}$; declines were registered in Russian Ordinary to the extent of 6d. at $\frac{1}{2}$, ditto in Preference at 10s. 6d., and Schibaieff Ordinary at 6s. 9d., while Spies lost 3d. at 11s. 9d., Anglo-Russians being without change at 11s. 9d.

Latest prices are given on page 72.

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THE TIN PLATE MARKET.

Messrs. Norton, Owen & Co., of 4, Bishopsgate Street Within, London, E.C., report under date 31st January, 1907, as follows :—

There is no material change in this market, although prices are a shade easier owing to continued offering of plates by dealers who have favourable contracts. Most of the large producers are, however, well booked and appear to be resolved to wait until the market is cleared of second-hand parcels, as the price of steel bars is unchanged. Makers' prices for large lines of plates for forward delivery are to-day as under :—

IC	18$\frac{3}{4}$ × 14	124 sheets	110 lbs.	15/4$\frac{1}{2}$ to 15/6 per box.
IC	19$\frac{1}{4}$ × 14	120 ,,	110 ,,	15/4$\frac{1}{2}$,, 15/6 ,,
IC	20 × 10	225 ,,	156 ,,	21/9 ,,

F.o.b. Wales. Tin lining and iron hooping extra,

CZARITZIN STOCKS OF PETROLEUM PRODUCTS.

On December 21st (o.s.) the following were the stocks of petroleum products at Czaritzin :—

	Kerosene. Poods.	Residuals. Poods.	Lubricating and other Oils. Poods.
Nobel	192,000	2,356,000	723,000
Mazout Co.	635,672	1,320,054	—
Merkulief Bros. ..	851,769	—	—
Assadulaeff and Merkulieff	512,600	481,385	—
Volga Caspian Co. ..	372,750	—	—
Caspian Society ..	248,712	—	—
Neft Co.	236,962	—	—
A. Merkulieff ..	180,000	—	—
Sokoloff	132,402	—	—
G. S. Dembot ..	126,501	177,977	—
Lapshin	—	145,000	—
Eisenstein	—	145,925	104,252
	3,389,368	4,626,341	827,258

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BATOUM PETROLEUM SHIPMENTS.

The following were the shipments of petroleum products from Batoum for the week ended January 6th (o.s.) :—

	Illuminating Oil.		Other Products.	
	1906.	1907.	1906.	1907.
To Europe ..	759,000	318,000	—	351,000
To the East ..	289,000	295,000	—	—
To Russian Ports	126,000	—	—	3,000
From Jan. 1st to Dec. 30th :—	1905.	1906.	1905.	1906.
To Europe ..	19,783,000	11,782,000	8,409,000	8,724,000
To the East ..	9,326,000	8,193,000	367,000	63,000
To Russian Ports	2,463,000	3,326,000	241,000	254,000

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CRYSTAL PALACE MOTOR SHOW.

The annual exhibition of motor cars, etc., at the Crystal Palace is now open until the 7th inst. We learn that there have been very good entries, and the exhibition is far more than ordinarily interesting. It should certainly command a visit from those interested in the progress of the motor industry.

THE THIRD

International Petroleum Congress

This Congress will take place at Bucarest during the first half of September next under the Patronage of His Royal Highness, Prince Ferdinand, Heir to the Throne of Roumania.

Upon the occasion there will be organised an Exhibition of Instruments, Apparatus, Reports and Statistical Data dealing with the Petroleum Industry.

The Congress and the Exhibition will comprise the following sections :—

SECTION I.

GEOLOGY, EXPLORATION, EXPLOITATION.

SECTION II.

CHEMISTRY and TECHNOLOGY of PETROLEUM.

SECTION III.

LEGISLATION, COMMERCE.

Persons desirous of joining the Congress are requested to communicate with the—

COMMISSION DU PETROLE
LABORATOIRE DE MINERALOGIE A L'UNIVERSITE,
BUCAREST, ROUMANIA.

PETROLEUM DEVELOPMENTS IN ALBERTA.

In the current issue of the *American Engineering and Mining Journal* a special correspondent refers to the recent developments in Alberta, Canada. He states that Mr. Eugene Coste, of Toronto, who has been actively engaged during the summer in connection with the exploitation of the oil resources of the Canadian North-west, says that so far no oil in any quantity has been developed, for the reason that drilling operations have not been conducted on a sufficiently extensive scale to thoroughly test the country. When this has been done it will possibly be found that two kinds of oil are obtainable—fuel oil to be used directly for engines and heating purposes, and the more valuable product for refining. Near Pincher Creek, south of the North Kootenay pass, a well 1,585 feet in depth has been drilled by the Alberta Oil Co., of Vancouver and Seattle, which has struck a little oil and some gas. The company intends to sink deeper and has ordered a new cable for this purpose At Dunmore Junction the Canadian Pacific Railway has a well for which Mr. Coste is acting as engineer. The well has been put down 800 feet, obtaining a show of gas, and will be sunk 2,000 feet more if necessary. A complete outfit worked by five men is on the ground. The company proposes to use the oil, if obtained in sufficient quantities, as fuel for its engines. There is a gas well alongside the railroad shops at Medicine Hat; the gas is used for lighting the station, and the municipality has two wells from which gas is supplied to the town. Mr. Coste is also superintending operations at the Canadian Northern Railway Co.'s well, near Langham, on the North Saskatchewan River, which has now reached a depth of 1,000 feet. It is expected that oil will be struck at about 1,700 feet. The Rocky Mountain Development Co. and the Western Oil and Coal Consolidated Co. are also working in Southern Alberta, but have not as yet reached oil in commercial quantities

A SUGGESTED PIPE LINE FROM CALIFORNIA TO THE ATLANTIC COAST.

America was ever the home of great enterprises, but the suggestion that petroleum shall be piped from the Californian fields across the American Continent to the refineries on the Atlantic seaboard is a proposal which, if accomplished, will stand out for many a day as being a record even for America. Our own correspondent in a dispatch dated January 13th, refers to the declining production in the eastern fields of America, and points out that inasmuch as it has been apparent for some time that the production has fallen below the demand, the latter will have to be met largely from the fields of California. Some of the large pipe lines used at one time exclusively for the transportation of Pennsylvanian oil to the Atlantic seaboard are now crowded to their full capacity with the product of the Mid-Continental fields. At the time of their construction, however, it was never expected that within two decades they would be conveying oil from the geographical centre of the United States to the Atlantic coast. Therefore from the point of view of what has so recently been accomplished in the way of pipe construction, it does not require a stretch of imagination to the breaking point to conceive the possibility of a trunk line connection with the Pacific seaboard on the east since more than one-half of the distance has already been covered.

A NEW AMERICAN ROTARY DRILL.

The St. Louis Well Machine and Tool Co., of St. Louis, Mo., have recently put upon the market a new rotary drill, which is receiving considerable attention on the part of operators in the various American fields. The inventors call special attention to the water openings, which are extremely large, and thereby they prevent throttling the pump, and at the same time enable the outfit being operated considerably easier. The opening in the round part of the shank is about the size of the drill rods themselves. The openings at the bottom are not only much larger than ordinarily is the case, but are so shaped that the stream of water is thrown along the blade in a wide stream keeping it clear of cuttings and preventing clogging. The water being directed against the bottom of the hole, assists the boring operation, and does not have a tendency to attack the sides of the hole which often causes a caving in when drills of the ordinary type are used.

AMERICA'S PARAFFIN WAX EXPORTS FOR NOVEMBER.

The exports of paraffin wax from America during November amounted to 19,348,895 pounds which was slightly over 2,000,000 pounds in excess of the quantities exported during the corresponding period of 1905. The exports to the various countries were as under:—

Exported to—	1906.	1905.
United Kingdom	10,302,323	13,172,079
Belgium	145,337	64,350
France	76,140	27,900
Germany	1,277,287	352,124
Italy..	1,670,553	2,600,287
Netherlands	823,318	639,971
Other European Countries ..	658,418	588,330
Central America and British Honduras	189,422	84,051
Mexico	166,492	333,746
Other South American Countries	54,527	22,885
Japan	671,205	1,288,059
British Australasia	123,409	—
Other Asia and Oceanica ..	518,258	41,691
British Africa	—	129,899
Other African Countries	355,804	—
Other Countries	13,138	3,523
Totals	17,045,631	19,348,895

CLASSIFIED IMPORTS INTO UNITED KINGDOM UP TO JANUARY 28th, 1907.

IN GALLONS.

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Country.	Illuminating.		Lubricating.		Residuals.		Gas Oil. (Solar)		Benzine.		Fuel Oil.		Other Descriptions.		Totals.	
	Since Jan. 14.	From Jan. 1.	Since Jan. 14.	From Jan. 1.	Since Jan. 14.	From Jan 1.	Since Jan. 14.	From Jan 1.	Since Jan. 14.	From Jan. 1.	Since Jan. 14.	From Jan. 1.	Since Jan. 14.	From Jan. 1.	Since Jan. 14.	From Jan. 1.
Austria ...	—	—	9,900	13,640	10,000	10,000	—	—	—	—	—	—	—	—	19,900	23,640
Belgium ...	140,700	140,700	12,580	33,210	—	—	—	—	—	—	—	—	590	590	153,870	174,500
Canada ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dutch India.	—	—	—	—	—	—	—	—	—	2,088,580	—	—	—	—	—	2,088,580
Germany ...	81,840	928,890	82,140	144,650	—	—	—	—	—	—	—	—	600	600	164,580	1,074,140
Holland ...	—	—	—	—	—	—	—	—	50,180	82,630	—	—	7,200	13,840	57,380	96,470
Roumania ...	808,400	1,102,830	—	—	—	—	—	1,065,900	—	591,450	—	126,700	—	—	808,400	2,886,880
Russia ...	2,563,280	2,843,280	560	782,700	—	—	—	—	—	—	—	—	—	—	2,563,840	3,625,980
U.S.A. ...	4,765,840	7,922,170	1,390,370	3,591,250	—	—	2,540,970	3,895,390	510	510	—	—	251,580	303,540	8,949,270	15,712,860
Other Countries	—	—	—	920	—	—	—	—	—	2,500	—	—	240	240	240	3,660
	8,360,060	12,937,870	1,495,550	4,566,370	10 000	10,000	2,540,970	4,961,290	50,690	2,765,670	—	126,700	260,210	318,810	12,717,480	25,686,710

AMERICAN PETROLEUM EXPORTS.

STATISTICS FOR DECEMBER.

According to the official publication of the Washington Bureau cf Statistics, the exports of petroleum from America from the various ports during December were as under:—

	1905. Quantities. Gallons.		1906. Quantities. Gallons.
CRUDE—			
Baltimore	—		—
Boston and Charlestown	—		—
Delaware	6,948,387		—
New York	9,171		3,509
Philadelphia	273,770		5,593,171
Galveston	1,411,507		5,970,669
Total	8,642,835	Total	11,567,976
Total value for the month, 1905			$462,654
,, ,, ,, 1906			$688,229
NAPHTHAS—			
Baltimore	—		1,000
Boston and Charlestown	—		—
Delaware	—		—
New York	285,127		283,829
Philadelphia	12,000		1,205,337
Galveston	—		—
Total	297,127	Total	1,490,166
Total value for the month, 1905			$47,450
,, ,, ,, 1905			$157,918
ILLUMINATING—			
Baltimore	670		1,392,166
Boston and Charlestown	9,724		12,681
Delaware	46,232		—
New York	46,541,297		43,229,902
Philadelphia	22,383,499		21,288,233
Galveston	3,261,545		187,283
Total	72,232,967	Total	66,110,265
Total value for the month, 1905			$4,591,888
,, ,, ,, 1906			$4,034,918
LUBRICATING—			
Baltimore	316,448		372,020
Boston and Charlestown	13,262		16,847
Delaware	—		—
New York	7,821,060		7,266,864
Philadelphia	4,437,149		3,481,110
Galveston	11,375		24,451
Total	12,599,294	Total	11,161,291
Total value for the month, 1905			$1,423,989
,, ,, ,, 1906			$1,411,309
RESIDUUM—			
Baltimore	—		—
Boston and Charlestown	—		—
Delaware	1,506		—
New York	2,371		14,120
Philadelphia	6,162,657		7,869,288
Galveston	1,070,690		286,639
Total	7,237,224	Total!	8,170,047
Total value for the month, 1905			$206,579
,, ,, ,, 1906			$248,204
TOTAL MINERAL OILS—			
Baltimore	317,118		1,765,186
Boston and Charlestown	22,986		29,528
Delaware	6,996,125		—
New York	54,649,026		50,798,305
Philadelphia	33,269,075		39,437,685
Galveston	5,755,117		6,469,041
Total	101,009,447	Total	98,499,745
Total value for the month, 1905			$6,732,560
,, ,, ,, 1906			$6,540,578

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YOKOHAMA PETROLEUM IMPORTS.

The imports of petroleum products into Yokohama during November amounted to 1,124,873 gallons, being valued at 232,193 yen, as compared with 246,320 gallons for the corresponding period of 1905, valued at 56,528 yen. During the eleven months of 1905 Yokohama received imports of petroleum to the extent of 12,766,644 gallons, these being valued at 2,686,056 yen.

THE GASES FROM THE OIL WELLS OF BORYSLAW,

A lecture on the above snbject was delivered at Boryslaw recently by Dr. J. Gruskiewicz before a large assembly of technical and commercial people interested in the petroleum industry.

The lecture aroused considerable interest in view of the many accidents which have been caused at Boryslaw recently by natural gas.

The lecturer spoke briefly of various kind of gases, and came to petroleum gas and its suitability as a fuel in dwelling houses, for which purpose it was used very widely at Boryslaw. In comparison with illuminating gas, which was likewise used for heating purposes, petroleum gas had the advantage of not being poisonous, a quality which coal gas possessed to a high degree. A person subjected to the influence of petroleum gas first experienced a din in the ears, his eyes grow dim, and he becomes intoxicated. When taken out into the fresh air, however, all these effects disappear, whilst, on the other hand, coal gas poisoning is very dangerous. Thus there was no fear of poisoning through petroleum gas, which was an advantage in cases when through leaky pipes the gas escaped into the house.

Petroleum gas, like illuminating gas, when mixed with air produced an explosive mixture, which was a great drawback. In that respect coal gas had the advantage over oil gas, in that the smallest quantity of it betrayed itself by its odour, whilst on the contrary, petroleum gas was practically odourless, and an explosive mixture could therefore be formed without being observed when a spark might cause incalculable damage. The lecturer proposed the perfuming of petroleum gas in order to enable its escape to be detected. Experiments made with this end in view yielded very satisfactory results. Below are given the limits of the explosive mixture of illuminating gas with air.

	Air. Per Cent.	Gas. Per Cent.
Lower explosive limit	83·4	16·6
Upper ,, ,,	93·4	6·6
Most violent explosion	90	10
Does not explode at all	80	20
,, ,, ,,	94·02	5·88

Experiments made by the lecturer in this direction with petroleum gas gave the same results.

The lecture was followed by a discussion, in which the necessity was made clear for regulating the pressure of the gas supplied to the houses in Boryslaw. At present the gas comes into the houses practically direct from the wells, merely passing through the separators, and the pressure of the gas in the houses is practically the same as in the boreholes, varying between zero and several atmospheres. In consequence of that, the flame in the oven sometimes went out altogether, whilst at others it was so intense that the oven became red hot, and threatened to fall in. Another and more serious source of danger in the use of petroleum gas was the fact that pipes carrying the gas into the houses were usually old ones considered unfit for other purposes, and were laid by men of insufficient experience.

The meeting declared itself in favour of legislation or administrative action making it compulsory to have regulators to regulate the pressure of the gas supplied to dwelling houses; to use new materials tested to withstand certain pressure; the work of installing a supply of petroleum gas to be carried out by experienced workmen, under the direction of a qualified engineer; for greater safety the gas to be perfumed; lastly, in each case arrangements are to be provided outside the house for prompt shutting off the supply of gas.

RECENT DEVELOPMENTS IN THE FERGHANA OIL FIELD.

SOME INTERESTING DATA.

Some time ago we published the news of the formation of a new company, at Tashkent, under the title of "Bitum" Petroleum Co. The company has now commenced drilling for petroleum in the locality of Kamysh-Bashi in the Ferghana Province.

The existence of petroleum in Ferghana has been known for a long time, but serious attention was directed to it only about eight years ago, with the completion of the Andijan branch of the Central Asian Railway. Of the numerous localities looked upon as petroliferous the following are best known:—Maili-Sai, with the Government borehole; Tchimion, with production in full swing; Rishtan, with boreholes of two companies; Sel-Rokho, where Mr. V. Alekseeff, of Moscow, is preparing to start drilling; and, lastly, the Kamysh-Bashi field. The last named is situated on the Yaipansky section of the Kokand district along the River Shur-Su, 21 to 23 miles to the south-west of the town of Kokand, and about 15 miles south of Posietovka station, between the villages of Karym-Duvan, Liakan and Tzsfary. Oil appears in the Kamysh-Bashi region at two spots: near the sulphur and ozokerite deposits, and at the turn of the road to the Alebaster quarries, where there are natural outcrops.

Both these petroleum deposits are geologically connected and form one deposit in an anticlinal, the axis of which has a direction of from east to west. When in 1898 the Scientific Mining Committee was discussing the question of selecting the most suitable point for starting a well at the expense of the Mining Department, Mr. G. D. Romanoff, the well-known geologist, selected the Kamysh-Bashi field as deserving particular attention from the point of view of the possible discovery of prolific deposits. Certain parts of this locality were exploited already 25 years ago by Mr. D. P. Petroff, and the oil treated at a small refinery. The crude oil was obtained from four small boreholes of 8-inch diameter and from 70 to 84 feet deep. About four years ago a large borehole was started on Mr. Petroff's concession. This well was brought down to 819 feet, and although there were indications of the nearness of the oil drilling had to be suspended for want of capital.

An analysis of the crude oil from Mr. Petroff's shallow wells made at the laboratory of Messrs. Nobel Bros. at Baku, yielded the following results:—

Degrees C.	Per cent.	Spec. Grav.
Up to 125	0·44	—
125 to 270	26·00	0·8012
270 to 285	3·20	0·8384
Residuals	69·20	0·917

The crude oil contains 2·7 per cent. of paraffin with a melting point of 52·5° C.

Analysis made of other Kamysh-Bashi crude oils yielded very similar results. The specific gravity ranges between 0·8793 and 0·955 at 15° C, The contents of paraffin are from 1·2 per cent. to 5½ per cent. By distillation up to 27° C. from 20·8 per cent. to 47·6 per cent. of distillate is obtained. Tests of Ferghana kerosene have shewn it to have a specific gravity of ·810 and a flash point 31° C., against 0·823 and 28° C. for Baku kerosene.

The existence of petroleum in this locality has thus been amply proved, and there is now only left to decide the question whether it exists in paying quantities, which can only be done by reaching the oil strata by boreholes with a practical diameter, and it is with this object in view that the new Bitum Petroleum Co. was formed. It has taken over two of Mr. Petroff's concessions in the southern part of Kamysh-Bashi, with the borehole, derrick and buildings. It is proposed to deepen the existing borehole until the oil stratum is reached, and also drill a well on the other plot. Should these two prove unsuccessful a third well will be drilled.

The plots to be worked by the company being situated between the town of Kokand and Posietovka station, the natural consumers of the company's production will be on the one hand the railway, and on the other the industrial establishments in Kokand, such as the cotton cleaning works, rice cleaning works, etc. Generally, however, in Central Asia the principal consumers of oil fuel are and will be the railways - the Orenburg-Tashkent, Central-Asian, with the Andijan branch, and the proposed Turkestan-Siberian line, also the Khiva-Aral steamship line, which connects Khiva with the Orenburg-Tashkent railway by way of the Oxus and the Sea of Aral.

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A Review of American Developments during 1906.

. . From Our Own Correspondent. . .

(Concluded from page 54.)

Pittsburg, *January 4th*, 1907.

An Undeveloped Pool.

About the first of August, Hervey, McNaught and Co., drilled in a test on Oliver Cochran Farm, located on State Road Run, Green district, Wetzel county, and got a fine producer in the Big Injun sand. A year before, the Carnegie Natural Gas Co. drilled a well on the same farm, and got a good showing of oil in the same formation. It was this that proved an incentive for drilling a second test, which proved a producer. A third well drilled on the farm started at close to 200 barrels a day, and is still holding up at about 70 barrels a day. Two more producers, located on other farms have been completed, and there are those who think a pool of some dimensions will be developed in that locality before the close of the year. The quality of the oil is of a very high grade, light amber in color and 52 gravity.

During the same week that the test was drilled in on the Cochran Farm, the Imperial Oil and Gas Co. introduced a surprise on the Ohio side, when it drilled in its No. 4 on the Peter Wahl Farm, and got a Keener sand producer that had an initial production of more than 1,000 barrels a day. For a time the well flowed at the rate of 60 barrels an hour. The location was inside of defined limits, and the decline in production was very rapid. Quite a number of wells were later drilled in the vicinity, but the best were light producers and some total failures.

Interest in the development east of Akron was revived in August, when Williams and Matthers drilled in a test on the Chalmers Farm, and got a 100 barrel producer. The size of this well called out some new work, but nothing better than 20 barrels a day has been the result.

Shallow Sand Territory.

The last half of the year, development work in the Cow Run sand district, on Clear Fork, in Munroe county, was very active. Some of the best producers ran as high as 700 barrels a day, and for a short time the production increased very rapidly. By the close of the year the limits had been defined and the interior very closely drilled over. While the producing area proved small those who were fortunate enough to get inside had no reason to complain, for all prospered.

Late in September, Tibbens and Withington drilled in a test on the Martha C. Hanlon Farm, located in the Rays Run district, in Washington county, and gave to South-eastern Ohio the distinction of having the largest producer of the year. The oil was developed in the Maxon sand, and when the pay was struck the well began to flow at a furious rate. Additional lead lines were put in, and for a time the production ran up to 90 barrels an hour. The first six days after the well was opened up the production averaged 1,000 barrels a day. It shewed good staying qualities and is still a good producer, but of the four wells that have since been completed in the same locality, the best is a five-barrel pumper, and two failed to find oil in the same producing formation.

A few weeks later a shallow sand discovery was made on the West Virginia side, located on McKim Creek, in Pleasants county. This proved another congested pool, but very rich. The best wells had an initial production of more than 200 barrels a day. It has now been defined and fully developed.

Producer in New Territory.

In the extreme lower south-west, during the last month, a test well was drilled into the Berea Grit that promises to bring a new county into the producing list. It is owned by the Big Creek Development Co. and is located on the S. Workman Farm, in Lincoln county.

The oil was developed in the Berea Grit, and it is estimated to be good for 15 or more barrels a day. The nearest and only development to this well is the Big Lime pool, near Milton, in Cabell county. The size of the well is not important, but the location is and future developments will be of interest.

In Washington county, Pa., the Natural Gas Co., of West Virginia has a fourth sand producer on the Dague Farm, located in East Finley township that has the talent guessing. Its actions have been somewhat erratic and there is much doubt as to the development of a pool. It is still producing about 80 barrels a day and the completion of new work in the vicinity will be awaited with interest.

On Neshannock Creek, in Mercer county, J. M. Patterson has been operating for a year with very good success. He has completed about 20 wells, and all are producers.

Ohio and Indiana.

While Pennysylvania, West Virginia and South-eastern Ohio, the districts producing high grade crude, furnish no large fields, North-western Ohio and Indiana made even a worse showing along the same line. New production of oil of the Lima grade came from the old districts The working over of old territory and the consequent completion of many light producers was the rule throughout the year. In a way there is no difference between the existing conditions in these two States and that that prevails in the Eastern States. The producing areas have been defined and future operations will consist largely of drilling odd locations and the occasional discovery of new, but congested pools. The failure to maintain the production of the old fields and the futile effort to discover new producing territory, caused a drainage on the stocks to meet the demand, amounting to more than 6,000,000 barrels, reducing the total of the Eastern fields to almost 10,000,000 barrels, the lowest recorded in many years.

The Illinois Field Made Good.

During the year the Illinois field became a leading factor in the production of a low grade oil. The producing area of the field was extended and the production increased more rapidly than in any other part of the United States. There are few instances in the history of the industry where development work was pushed with so much energy and results so uniformly satisfactory.

Two years ago attention was first called to Illinois possibilities by drilling in light wells near Casey, in Clark county. While the wells were light and the oil of an inferior grade, it was shallow territory and not expensive to operate. The latter commended itself to Eastern operators, and they began investing and later started development work.

Early in the past year wildcatting became a feature in adjacent counties, and it soon brought results. Pittsburg operators had taken up a block of leases near Oblong, in Crawford county, about 20 miles south of the old development, and drilled their first test on the Shire Farm. The shallow formation was drilled through and shewed but little oil. It was then drilled deeper and another producing formation encountered, and the result was a gusher. While interest in the field had been growing, the new strike made producers from all over the country, as far west as Kansas, take notice. Leases became very active and the bonus money demanded went skyward. Landowners near the big well asked $100 an acre bonus, and got it. There was an immediate rush to start new work and gushers followed in rapid succession. The production increased so rapidly that it was not possible to transport it or erect tankage fast enough to handle it. It was estimated that in five months the production had been increased from 10,000 to 30,000 barrels a day. Much of the oil was stored in the field, pending the completion of a pipe line. There was nothing left but to curtail operations, and for almost two months development work was suspended.

At the close of the year transportation facilities had been provided by the completion of a pipe line, and the problem of getting oil to the market has been solved. It has been conservatively estimated that if there had been no curtailment of operations the production could have been easily increased to 60,000 barrels a day. With the return of spring there will be great activity. The field now embraces parts of six counties, with Crawford county as the first in the amount of oil produced. The field can scarcely be said defined in any direction except to the north-east. Lawrence county to the south is coming to the front and promises to rival Crawford in production and producing area.

The Mid-Continent Fields.

In the Mid-Continent field, Kansas, Indian and Oklahoma Territories, conditions similar to those in Illinois prevailed. Production increased faster than it could be handled and development work had to be curtailed. Operators shewed some reluctance, and it was not till the production had reached 60,000 barrels a day that a halt was called. New and very productive pools were discovered, and many of these await development. Stocks increased rapidly during the year, and at the close amounted to about 22,000,000 barrels or more than twice the stocks of Pennsylvania, West Virginia, Ohio and Indiana and Kentucky.

In the Indian Territory, operators have been greatly harrassed by arbitrary and unwarranted rulings made by the Secretary of the Interior. Restrictions have been placed on the acreage, one company or individual may hold leases. Nonsensical legislation in Kansas proved an obstruction for many months. Kansas, however, is no longer in the race for new production. Those familiar with conditions in the Territories are of the opinion that the production can be increased to 150,000 barrels a day, once the facilities for handling that amount of oil have been completed.

Texas and Louisiana.

No new fields were discovered on the Gulf Coast during the past year. Production declined heavily, and at the close of the year Texas and Louisiana were not producing more than 50,000 barrels a day. The increasing demand for fuel oil made it necessary to draw on the stocks to the extent of about 10,000,000 barrels to supply the deficiency.

Late in the year the situation had reached the point where the source of a new supply of production became imperative. To meet the emergency, two of the largest operating and transporting companies in the Texas fields are engaged in the preliminary work of laying pipe lines to the Territories. Both expect to have the work completed before the close of the current year. The failure to find new production and the increased demand has brought the market price of the fuel product to a higher point than it has ever attained, 60 to 75 cents a barrel.

The Oil Market.

More oil was exported during the past than the preceding year. For the year just closed the exports will shew an increase of about 20,000,000 gallons with an increased valuation of almost $5,000,000.

The home markets for crude were subjected to few changes during the year. In the Middle West the decline was the most marked. Illinois suffered a heavy decline as compared with the first of the year.

The appended table shews the changes of the credit balance market for the various grades of crude produced in large quantities:—

Pennsylvania.		North Lima.	
January 1st	1·58	January 1st	·98
April 13th	1·61	April 13th	·96
,, 25th	1·64	,, 25th	·98
July 28th	1·61	July 28th	·96
August 2nd	1·58	August 2nd	·94
December 31st	1·58	,, 15th	.92
		,, 28th	·90
		,, 31st	·90

South Lima and Indiana quotations were 5 cents ower than North Lima during the year. The quotation for Kansas oil of 32 dregree gravity and above, at the first of the year was 52 cents., at the close 39 cents. The quotation posted for Illinois crude on July 28th was 81 cents. On August 2nd it was reduced to 79 cents. and August 15th and 28th to 69 and 64, respectively, the lower quotation being the price at the close of the year.

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ROUMANIAN PRODUCTION DURING NOVEMBER.

The approximate production of the leading petroleum firms in Roumania during November was as follows:—

	Tons.
Steaua-Romana	24,629
Bustenari Co.	11,961
Romano-American Co.	4,827
Telega Oil Co.	3,783
International Co.	3,302
Colombia Co.	3,051
Trajan Co.	1,598
P. Petrescu (Glodeni)	1,912
Aquila Franco-Romana	1,256
Arnheemsche Petroleum Co.	1,042

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The Petroleums of North America.

Being a Comprehensive Account of the Constituents of American Petroleum. . . . .

By Mr. CLIFFORD RICHARDSON.

(*Continued from page 48.*)

The residue, amounting to 9·9 per cent. of the original oil, was evaporated in an open dish to 6 per cent.—it was then a brittle pitch which had the following properties :—

Specific gravity, 25/25°	1·0454
Colour	Black
Lustre	Shiny
Structure	Massive
Fracture	Conchoidal
Hardness—penetration	15
Bitumen soluble in CS_2 air temperature	99·8%
Organic matter insoluble	·1
Inorganic or mineral matter	·1
	100·0
Soluble in 88° naphtha, air temperature	60·0%
Per cent. of total bitumen insoluble	60·1
Soluble in 62° naphtha	64·8
Per cent. of total bitumen soluble	64·9
Bitumen yields on ignition— Fixed carbon	21·13

A similiar but softer pitch, made by boiling crude oil for 24 hours in an open dish, had the following properties, as compared with a "D" grade residue, or paving asphalt, from Los Angeles, Cal., oil :—

	Beaumont, Texas.	Los Angeles, California.
Penetration at 25°	78	78
Specific gravity 25/25°	·9943	·9964
Bitumen soluble in 88° naphtha, air temperature	78·3%	74·4%
Bitumen soluble in 88° naphtha	84·3%	81·6%
Fixed carbon	8·7%	15·0%

FRACTIONAL DISTILLATION.

Fraction.	Per Cent. Distillate.	Spec. Grav. 26°.	Refractive Index.
Atmospheric pressure—			
149-205°	1·0	·8114	1·495
205–227	8·4	·8408	1·461
227–249	4·4	·8569	1·467
249–271	10·8	·8705	1·476
271–293	10·8	·8863	1·485
293–317	13·1	·9009	1·492
20 mm. pressure—			
200–240°	13·0	·9184	1·505
240–280	8·8	·9349	1·514
280–320	10·6	·9429	1·521
Total	80·9		

Residue, slow flow at 21°.
Difference in boiling point for 760 mm. pressure, 117°.

EFFECT OF REAGENTS ON DISTILLATES.

Fractions.	Removed.	Spec. Grav. after treatment.	Refractive Index. 20°.
Excess of strong H_2SO_4.			
205–227°	7·7%	·8357	1·463
249–271	17·8	·8497	1·474
293–317	21·6	·8929	1·486
Excess of $H_2SO_4+HNO_2$ after H_2SO_4.			
293–317	11·0	·8879	1·483

Total oil removed by reagents, 32·6 per cent.

EXAMINATION OF THE PRECEDING RESULTS.

From the preceding results it appears, although the two specimens are slightly different in their specific gravity and flash point, that the Beaumont oil has a very high density for one beginning to distil at 110 degrees, and that the hydrocarbons of which it is composed, as shewn by the ultimate composition of the original oil, and by a comparison of the specific gravity and refractive index of the 150-300 degrees distillates from the Engler flasks with similar distillates from Eastern oils, must belong largely or entirely to some series other than the paraffin, and probably to the same series as those found in the Sour Lake petroleum, which we have previously examined (J. S. Chem. Ind., 1900, 19, 121), rather than those of the Corsicana oil which consists largely of paraffins. It is also plain that the oil contains a much larger proportion of unsaturated hydrocarbons removable by sulphuric acid than Pennsylvania petroleum. The Beaumont oil has a high sulphur content, and carries, as it comes from the wells, a large amount of hydrogen sulphide in solution. This gas has previously been observed in solution in petroleum, but not in so large quantity as at Beaumont. The sulphuretted hydrogen is largely lost on standing and more completely on blowing air through it. After such treatment the oil contained 1·75 per cent. of sulphur in the form of sulphur derivatives of the hydrocarbons and as free sulphur.

Mabery has examined in detail fractions of this oil where heaps occur at certain temperatures on contined distillation, with the following results :—

Fractions.	Distillates. Per Cent.
760 mm pressure.	
145–200°	4·0
200–250	11·0
14 mm. pressure.	
95–100°	17·0
150–200	17·0
250–300	51·0
Residue	15·0
	100·0

Fraction.	Symbol.	Sp. Gr. 20°.	Carbon. Per cent.	Hydrogen. Per Cent.	Refract. Ind.
130–135°	$C_{12}H_{22}$	·8553	86·86	13·27	—
155–160	$C_{14}H_{26}$	·8746	86·26	13·48	1·473
190–195	$C_{16}H_{32}$	·8915	87·26	12·54	1·484

It appears that these hydrocarbons belong to the C_nH_{2n-2} series, and undoubtedly at higher boiling points are of the C_nH_{2n-4} series.

The heavy fluxes, or oily residuums from Beaumont oil, where the distillation is stopped before the production of a residual pitch, have the following characteristics :—

HEAVY RESIDUUM—BEAUMONT, TEXAS.

PHYSICAL PROPERTIES.

Specific gravity, 25/25°	·9735
Flash	214°

CHEMICAL CHARACTERISTICS.

Loss, 160°, 7 hours	0·6%
Character of residue	Soft.
Loss, 200°, 7 hours (fresh sample)	6·2%
Character of residue	Soft.
Bitumen soluble in CS_2, air temperature	99·6%
Organic matter insoluble	·4
Inorganic or mineral matter	·0
	100·0

	Per cent.
Bitumen insoluble in 88° naphtha, air temperature —Pitch	4·8
Per cent. of soluble bitumen removed by H_2SO_4	20·9
Per cent. of total bitumen as saturated hydrocarbons	79·4
Per cent. of solid paraffins	1·7
Fixed carbons	3·5

On comparing this residuum with that prepared from California oil, it is seen to be less dense and to differ from it in such a way as to shew that the hydrocarbons of which the two are composed are quite different. It is worthy of note that it contains an appreciable percentage of solid paraffins. The Beaumant petroleum, therefore, contains not only the hydrocarbons of the various polymethylene series, but also some of the C_nH_{2n+2} series.

As the oil is distilled industrially a much larger percentage of residual pitch is obtained than by gradual distillation at reduced pressures in the laboratory, in which respect the oil differs entirely in its behaviour for that from California fields, where a much smaller percentage is obtained industrially. The industrial pitch has the following characteristics :—

RESIDUUM PITCH FROM BEAUMONT (TEXAS) OIL.

PHYICAL PROPERTIES.

Specific gravity 20/25°	1·0803
Colour of powder or streak	Black
Lustre	Lustrous
Structure	Uniform
Fracture	Semi-Conchoidal
Hardness, original substance	1
Odour	Asphaltic
Softens	110°
Flows	119°
Penetration at 25°	13

CHEMICAL CHARACTERISTICS.

Loss, 160°, 7 hours	13%
Character of residue	Smooth
Loss, 200°, 7 hours (fresh sample)	·19%
Character of residue	Smooth
Bitumen soluble in CS_2, air temperature	99·0%
Organic matter insoluble	·8
Inorganic or mineral matter	·2
	100·0

	Per cent.
Malthenes :—	
Bitumen soluble in 88° naphtha, air temperature	65·4
This is per cent. of total bitumen	66·1
Per cent. of soluble bitumen removed by H_2SO_4	32·1
Per cent. of total bitumen as saturated hydrocarbons	44·8
Bitumen soluble in 62° naphtha	71·5
This is per cent. of total bitumen	72·2
Carbenes—	
Bitumen insoluble in carbon tetrachloride, air temperature	5·1
Bitumen yields on ignition—	
Fixed carbon	24·0
Paraffin scale	1·2

It is of interest to compare this residual pitch with that prepared from Calfornia petroleum. Its most striking characteristic is the presence of from 1 to 2 per cent. of paraffin scale, derived from the original oil. The percentage of fixed carbon which it yields is considerably higher than is contained in the California petroleum, although a higher percentage would be found in the latter were the distillation carried to the same extremity. It contains a larger percentage of hydrocarbons unattacked by acid.

Other Fields.

Petroleums from some of the other fields in Texas resemble in part that from the Corsicana field, and more than from the Beaumont field. The heaviest oils are, however, quite widely distributed, especially in the shallower wells. In the Saratoga district the oil is of a density of from ·9722 to ·9333, 12 0 to 20·0 degrees B.; in the Batson Prarie district ·9150 to ·9091, 23·0 to 24·0 degrees B.; in the Matagorda pool ·9396 to ·9333, 19·0 to 20·0 degrees B., while the lighter petroleums ·9150 to ·8140, 23·0 to 42·0 degrees B., are found in the South Basque, Henrietta, Batson Prairie and a few minor districts. None of these oils has been examined in detail.

From the preceding data it appears that there is a very great variation in the character of the petroleum which is produced in Texas. All of the Texas oil contains some paraffin scale, and in all cases leave a larger or smaller amount of asphaltic residue. The heaviest petroleums, however, differ essentially in the character of their higher boiling hydrocarbons from California oil.

The Kansas Field.

The Kansas oil field covers a large area and extends into Oklahoma and Indian Territories. The petroleum is of very varied character, but much of it has a density of ·8750, 30·0 degrees B. and less, and is very desirable for refining purposes. About 1,000,000 barrels was the output of 1903, but development has been so rapid that this exceeded 4,500,000 barrels in 1904 in Kansas alone, while over 1,300,000 barrels were produced in Indian Territory and Oklahoma in that year. The wells are from 350 to 1,500 feet deep and the oil is found in sands whose horizons are not known to the writer. It would seem that eventually this field will be connected with that of Texas.

A typical Kansas oil of ·8750 gravity, 30 degrees B. received in 1901 from the Federal Gas and Oil Co., Cherryvale, Montgomery county, was examined by the writer with the following results :—

Specific gravity, 25/25°	873
Flash	32°
Character of residue at 200°	Soft
Volatile, 160°, to constant weight	47·4%
Volatile at 200°, to constant weight	59·4%
Character of residue	Soft—paraffin

Distillation *in vacuo* 20 mm. pressure.

Fraction.	Per Cent. Distillate.	Spec, Grav. 20°.	Refractive Index.
[1]60- 80°	3·2	·7637	1·425
[1]80 100	2·8	·7683	1·428
[1]100-120	4·3	·7814	1·434
[1]120-140	6·0	·8008	1·443
[1]140-160	8·1	·8209	1·454
[1]160-180	5·1	·8382	1·462
[1]180-200	5·7	·8489	1·469
[1]200-220	7·0	·8608	1·475
[2]220-240	5·1	·8911	1·482
[2]240-260	6·2	Boiled over	—
[3]260-280	12·5	Boiled over	—
[4]280-300	4·2	·8963	1·498

[1] Light straw colour. [2] Solid ·0° crystalline paraffin.
[3] Rich in paraffin. [4] Solid.

The higher distillates in this oil separate paraffin, and the residue is of a distinctly paraffin nature. The distillates correspond in character to those obtained from the Trenton limestone petroleum of Ohio, and shew that the hydrocarbons contained in the oil must, in addition to the paraffins, consist of the same series found in the latter oil, that is to say, the C_nH_{2n-2} and C_nH_{2n-4} series.

These oils are collected by the pipe lines and refined at Neodesha, Kansas, while additional lines now carry them to Whiting, Indiana, for treatment at the refineries of the Standard Oil Co. The characteristics of the residuum produced at the Neodesha refinery are as follows :—

PHYSICAL PROPERTIES.

Specific gravity, 25/25°	·9328
Beaume	20·5
Colour	Brown
Odour	Petroleum
Flash	196°

CHEMICAL CHARACTERISTICS.

Loss 160°, 7 hours	2·6%
Character of residue	Soft
Loss 200°, 7 hours (fresh sample)	5·7%
Character of residue	Soft
Bitumen insoluble in 88° naphtha, air temperature—Pitch	3·6%
Per cent. of soluble bitumen removed by H_2SO_4	14·4
Per cent. of solid paraffins	7·8%
Fixed carbon	4·1%

The residue from the distillation of Kansas oil reveals its mixed character by the paraffin scale which it contains and the higher fixed carbon which it yields.

The Kansas oil is becoming an important factor in the petroleum industry in the United States. The wells have very considerable staying qualities and some of those in the territories are large producers even as compared with some of the gushers of the old Eastern fields. It is, of course, denser than any of the eastern petroleums, as a rule, but differs from the Ohio oil in being comparatively free from sulphur compounds. Like the Ohio oil the higher distillates are very rich in paraffin scale.

Louisiana Field.

Within the last four years Louisiana has made a decided record as a petroleum producing State, the output for 1904, 6,611 419 barrels, making it the eighth in rank among the producing States, while but a little over half-a-million barrels were produced in 1902.

Petroleum has been found at a number of points in the State, but the principal field is at Jennings, and 12 miles west of there, which is known as the Welsh field. The other localities have not been largely developed.

(To be concluded.)

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The International Petroleum Co., of Roumania, during the last quarter of 1906 produced 10,562 tons of crude oil against 11,500 tons produced by them in the corresponding quarter of 1905.

The American Oil Market.

New York, Week ended Jan. 19th.

News from the oil fields failed to be of an interesting character. In the lower South-west and South-eastern Ohio only light wells have been reported. There has been no increase in the completed work in the former fields, and the new wells brought in figured of a small average size. In Ohio the completions shew a further material reduction, and in few districts hardly any activity in development has been noted. New oil pools continue few in number, and dusters were numerous. Some of the extensions to some of the old fields that looked promising several months ago have proved a failure. The Eastern field, as well as Ohio and Indiana, are gradually dropping off in production. The demand in Indiana for high grade oil continues good, but there appears to be little facilities of increasing the output. Little new work is under way, and a moderate amount of interest is attached to those drilling up to the present time, the winter weather has not been severe enough to cause a curtailment in the production of the oil fields. The sources of new supply are very limited, says the *Oil, Paint and Drug Reporter*, and it is becoming apparent that the production has become inadequate to meet the demand, which must sooner or later be met with the heavier grades of oil from the West. In the Mid-Continent fields all previous records were broken again by the pipe runs during the opening week of the year. The runs footed up 547,567 barrels, and the deliveries were 430,224 barrels, leaving 117,343 barrels to go into storage tanks. Field operations have been very light since the opening of the year. due to unfavourable weather and rising streams. Completions have been light. Reports from the Texas fields have been less interesting, but prices continued firm owing to the decreasing production. California oil will hereafter be one of the principal agencies to help in the manufacture of the gunpowder for the armies and navies of the world. A contract has been entered into between an oil company and half-a-dozen nitrate of soda concerns of the north of Chili for about 100,000 barrels of oil a year. The following prices as quoted are for Texas oil sold on credit balance only. Quotations for Texas oil are: —Batson, light, 65 to 70c., Humble, heavy, 62 to 67c.; Jennings, 63c.; Saratoga, 65 to 70c.; Spindle Top, 72 to 73c.; Sour Lake, 65 to 70c.; Dayton, light, 65 to 70c.; heavy, 60 to 65c., as to gravity.

Refined and Products.—The demand for refined for export and from home consumers has been fairly active, particularly from the former buyer, and sales footed up a good volume at former prices. Prices of oil in drums were advanced 50c. to $8. Prices of American S.W. oil during the month of December have advanced from 6⅛d. to 6¾d. The local total engagements during the week in the local market amounted to over 102,000 barrels.

The price for barrelled oil for export remained unchanged, and the market is quoted at 7·50c. for New York loading, and 7·45c. for Philadelphia loading. The principal foreign markets remained stationary. Freight rates are steady at 2s. 2d. @ 3s. 0d. hence to London, and 2s. 3d. @ 3s. 0d. to Continental ports, as to port and vessel.

Cases for export were in unusual active demand, and sales of over 750,000 cases were reported. The price of plain tops remained stationary at 10c. Freight rates continued firm and unchanged.

Crude for export continued slow, and no sales were reported. Pennsylvania crude closed at 7·50c. in barrels. Cases for export have been quiet, and no sales have been reported.

CLOSING QUOTATIONS.

	Crude.	Week ended	
		Jan. 12. 1907.	Jan. 19. 1907.
National Tran. Certificates	per bbl.	$1·58@1·59	$1·58@1·59
Pennsylvania crude in bbls.	per gal.	7·60	7·60
Pennsylvania crude in bulk	.. ..	4·50	4·50
Residuum, bbls. for export	.. ..	6@6½	6@6½

Crude at the Wells.

The quotations for oil represented by credit balances were ;—

	Week ended	
	Jan. 19. 1906.	Jan. 19. 1907.
Tiona	1·68	1·68
Pennsylvania	1·58	1·58
North Lima	0·94	0·90
South Lima	0·89	0·85
Indiana	0·89	0·85
Canadian Oil:		
Petrolia	1·34	1·30

Refined—For Export.

		Week ended	
		Jan. 12. 1907.	Jan. 19. 1907.
Cargo Lots for export..	in barrels	7·50	7·50
	in bulk ..	4·40	4·40
Philadelphia loading ..	in barrels	7·45	7·45

Refined in Cases—110 Fire Test.

	Week ended	
	Jan. 12.	Jan. 19.
3,000 to 10,000..	10·05	10·15
1,000 to 3,000..	10·20	10·20

Refined—Jobbing Lots.

In barrels, pkgs. included.

		Week ended	
		Jan. 12.	Jan. 19.
120 fire test, S.W. ..	in barrels	12	12
130 fire test, S.W. ..	.. ..	12½	12½
150 fire test, W.W. ..	.. ..	13	13
In bulk from tanks	.. ..	10	10
300 fire test	.. ..	12¾@13½	12¾@13½

Naphtha and Gasolene.

	Week ended	
	Jan. 12.	Jan. 19.
Naphtha, crude, car. lots, 68 @ 72 deg.	15·00	15·00
Gasolene, 86 deg...	23·00	23·00

Pennsylvanian Oil Runs from Jan. 11th to Jan. 17th were:—Jan. 11th, 143,163; Jan. 12th and 13th, 155,946; Jan. 14th, 66,838; Jan. 15th, 93,015; Jan. 16th, 142,284; Jan 17th, 142,550. For the month of December, 2,999,369.

The Deliveries of Pennsylvania Oil for the same dates were:—199,954; 273,956; 133,158; 148,952; 145,914; 170,236. For the month of Dec., 4,576,554.

Charters for the Week.

The total charters for refined, crude, naphtha, etc., in bulk, barrels and cases, during the week ended January 18th and from Jan. 1st, were as follows:—

	Week.	Year.	1906.
Refined, barrels and bulk	101,600	11,984,100	327,200
Refined, cases	730,000	18,164,100	1,334,000
Crude, barrels and bulk..	—	1,431,800	59,200
Crude, cases	—	325,000	2,500
Naphtha, barrels	—	277,300	18,000
Residuum, barrels ..	—	684,901	32,000
Lubricating, barrels ..	—	—	3,100
Total, barrels cde. eq. ..	393,016	24,238,330	1,019,214

Clearances for the Week.

During the week ended Jan. 18th, and since Jan. 1 the clearances of petroleum, in gallons, from the port of New York, were as follows:—

	Week.	Year.	1906.
Refined	8,658,710	87,815,500	16,548,840
Crude	—	—	7,700
Naphtha	59.900	281,350	1,026,950
Residuum	2,000	4,000	—

Export Statistics.

The total exports from the port of New York and from the United States have been:—

	Gallons.
From New York, week ended Jan. 18th ..	11,144.946
Total from New York, from Jan. 1st, 1907 ..	36,688,799
Same period last year	22,076,153
Increase	14,612,646
From United States, week ended Jan. 18th ..	22,494,325
Total from United States, since Jan. 1, 1907	69,853,575
Same period last year	44,132,762
Increase	25,720,813

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The "Review" Shipping List.

FEBRUARY 1, 1907.

(The following abbreviations are used in this table:—L. Left; P. Passed; Arr. Arrived; Sp. Spoken; Tr. Trading.)

Vessel.	From.	For.	Latest Date and Position.
ALICE ISABELLE	Philadelphia	Sables d'Olonne	Arr. Jan. 25
ALCHYMIST	Havre	Southampton	L. Jan. 22
ALEMBIC	Sydney (C.B.)	New York	L. Dec. 19
AMERICAN	San Francisco	New York	At Coronel, Jan. 10
APPALACHEE	Shanghai	San Francisco	L Dec. 25
APSCHERON	Batoum	Barcelona & St. Louis (Rhone)	P. Const'ple, Jan. 15
ARAL	Hamburg	Philadelphia	Arr. Jan. 23
ARAS	Newport	Philadelphia	Arr. Jan. 29
ARGYLL	Port Harford	Ancon	L. Dec. 31
ASTRAKHAN	Hamburg	Philadelphia	L. Jan. 24
AUGUST KORFF	Manchester	Philadelphia	P. O. Hd. Kinsale Jan. 23
AUREOLE	Tyne	New York	Arr. Jan. 25
ATLAS	San Francisco	Port Harford	L. Jan. 12
AZOV	—	—	Trading on W. C. of South Amca.
BAKU STANDARD	Rouen	Tyne	Arr. Jan. 27
BALAKANI	London	Port Arthur (Texas)	P. Prawle Pt., Jan. 10
BATOUM	Philadelphia	London	Arr. Jan. 26
BAYONNE	Hull	Tyne	Arr. Nov. 23
BEACON LIGHT	Tyne	Philadelphia	Arr. Jan. 27
BEME	Rangoon	Bombay & Mormugau	L. Jan. 24
BLOOMFIELD	Avonmouth	Philadelphia	P. Fastnet, Jan. 20
BORJOM	Odessa	Batoum	Arr. Jan. 9
BRILLIANT	Tyne	Philadelphia	L. Jan. 26
BROADMAYNE	Antwerp	Tyne	Arr. Jan. 5
BULLMOUTH	Balekpappan	Shanghai	Arr. Jan. 23
BULYSSES	Balekpappan	Pulo Samboe	Arr. Jan. 28
BURGERMEISTER PETERSEN	Stettin	Philadelphia	Arr. Jan. 29
CADAGUA	Philadelphia	Rouen	Arr. Jan. 18
CALCUTTA	San Francisco	Shanghai	L. Jan. 13
CARDIUM	Cardiff	Balekappan	P. Gibraltar, Jan. 23
CATANIA	New York	San Francisco	Arr. Jan. 11
CAUCASIAN	Philadelphia	Dublin	L. Belfast, Jan. 29
CHARLOIS	Baltimore	Rotterdam	Arr. Jan. 27
CHESAPEAKE	New York	Calcutta	L. Jan. 14
CHESTER	Antwerp	New York	P. Lizard, Jan. 26
CIRCASIAN PRINCE	—	—	Trading on W.C. of South Amca.
CLAM	Pulo Sambo	—	At Colombo, Jan. 27
COWRIE	Batoum	—	L. Jan. 27
COL. E. L. DRAKE	Sabine	New York	Arr. Jan. 12
CYMBELINE	Philadelphia	London	P. Del. Break., Jan. 20
CZAR NICOLAI II.	Hamburg	Batoum	P. Prawle Pt., Jan. 29
DAGHESTAN	Antwerp	Batoum	Strnd'd in Scheldt Jan. 23
DELAWARE	Philadelphia	Avonmouth	L. Jan. 21
DEUTSCHLAND	New York	Rotterdam	L. Jan. 20
DIAMANT	Hamburg	New York	L. Jan. 28
ELAX	—	Tyne	Arr. Jan 12
ELISE MARIE	Tyne	Philadelphia	Arr. Jan. 27
ENERGIE	Tyne	Philadelphia	At New York, Jan. 28
ERIVAN	Manchester	Batoum	P. Sagres, Jan. 23
TELKA	Batoum	Venice and Trieste	L. Jan. 22
EUPLECTELA	Batoum	London	Off Ushant, Jan. 30
EXCELSIOR	New York	Savona	Arr. Jan. 19
EZIO	—	—	Coasting Peru
FRANCE MARIE	Philadelphia	Marseilles	P. Delaware Bk., Jan. 15
GEESTEMUNDE	Philadelphia	Gothenburg	P. Del. Break, Jan. 17
GENESSE	Sunderland	New Orleans	At St. Michaels, Jan. 28
GEORGIAN PRINCE	Havana	New York	Arr. Jan. 20
GOLDMOUTH	Singapore	—	L. Dec. 27
GUT HEIL	Philadelphia	Hamburg	P. Del. Break., Jan. 20
HAINAUT	New York	Antwerp	Arr. Jan. 29
HELIOS	Tyne	Philadelphia	Arr. Jan. 28
HOTHAM NEWTON	New York	Lisbon and Oporto	At Lisbon, Jan. 27
HOUSATONIC	Bengkalis (Sumatra)	England	At Port Natal, Jan. 11
IMPERIAL	—	—	Tr. on Lakes btn. U.S. and Can.
JOANNIS COUTZIS	Piræus	Batoum	Arr. Jan. 22
J. B. AUG. KESSLER	Palembang	—	At Port Natal, about Jan. 11
JAMES BRAND	Kustendje	Rouen	L. Constant'ple, Jan. 18
JULES HENRY	Marseilles	Philadelphia	L. Jan. 16
KURA	Philadelphia	Manchester	Arr. Jan. 27
LA CAMPINE	Antwerp	New York	Arr. Jan. 27
LA FLANDRE	New York	Ghent	L. Zeebrugge, Jan. 30
LA HESBAYE	Antwerp	New York	Off I. of W., Jan. 21
LA MADELEINE	Dunkirk	Nantes	Arr. Jan. 18
LA VIGUESA	Philadelphia	Seville	P. Del. Break, Jan. 20
LACKAWANNA	New York	Calcutta	Arr. about Jan. 23
LANSING	Honololu	Port Harford	L. Jan. 6
LE COQ	Blaye	Kustendje	L. Constan'ple, Jan. 23
LOUTSCH	Barcelona	Novorossisk	P. Dardenelles, Jan. 10
LUCERNA	Philadelphia	Bergen	P. Delaware Bk. Jan. 20
LUCIFER	Venice	New York	Arr. Jan. 28
LUCIGEN	Tyne	Philadelphia	Arr. Jan. 22
LUCILINE	Philadelphia	Cette	L. Jan 25
LUMEN	Tyne	Philadelphia	L. Jan. 29
LUX	Novorossisk	Rouen	Arr. Jan. 26
MANHATTAN	Philadelphia	Genoa	P. Del. Break., Jan. 13
MANNHEIM	Tyne	Philadelphia	P. Dunnet Head, Jan. 30
MARGARETHA	Batoum	Alexandria	Arr. Jan. 20
MAVERICK	New York	San Francisco	Arr. Jan. 2
METEOR	Nicolaieff	Genoa and Oneglia	L. Constant'ple, Jan. 21
MEXICAN PRINCE	Batoum	Hull	Arr. Jan. 16
MIRA	Philadelphia	Dover	P. Del. Break., Jan. 20
MUREX	Hong Kong	—	L Jan. 27
NARRAGANSETT	London	New York	Arr. Jan. 23
NERITE	—	—	Tr. in China Seas
NEW YORK	Southampton	New York	Sig. Browhead, Jan. 27
OCEAN	Amsterdam	New York	P. Prawle, Jan. 26
OILFIELD	Barry	Philadelphia	Arr. Jan. 29
ORANJE PRINCE	Flushing	Tyne	Arr. Jan. 13
ORIFLAMME	Blaye	Novorossisk	P. Dardanelles, Jan. 24
OSCEOLA	Genoa	Cape Verds	P. Gibraltar, Jan. 12
OTTAWA	Hull	Philadelphia	Arr. Jan. 20
OURAL	Dunkirk	Batoum	P. Gibraltar, Jan. 30
PALEMBANG	—	—	Tr. Sts. Settlem'ts & China Seas
PAULA	Amsterdam.	New York	P. Beachy Head, Jan. 16
PECTAN	London and Emden	Galveston	P. Prawle, Jan. 21
PENNOIL	Tyne	Philadelphia	P. Dunnet Head, Jan. 24
PERLAK	Yokohama	Palembang	L. Dec. 16
PHOEBUS	Rotterdam	New York	Arr. Jan. 24
PINNA	Hamburg	New York	Arr. Jan. 30
POTOMAC	New York	Manchester	Arr. Jan. 30
PROMETHEUS	Rotterdam	New York	L. Jan. 24
PRUDENTIA	Port Arthur (Texas)	Dover	Cleared Port Arthur (Texas)

Vessel.	From.	For.	Latest Date and Position.
QUEVILLY	Philadelphia	Rouen	P. Delaware Bk., Jan. 12
RION	Kustendje & Manchester	Penarth	Arr. Jan. 30
ROCK LIGHT	London	Port Arthur (Texas)	P. Dungeness, Jan. 23
ROSSIJA	Tyne	Messina	L. Jan. 19
ROTTERDAM	New York	Rotterdam	L. Jan. 20
RUSSIAN PRINCE	Antwerp	—	At Key West, Jan. 27
SALAHADJI	—	—	Tr. Sts. Settlem'ts and Java Seas
SAXOLEINE	Philadelphia	Havre	P. Del. Break, Jan. 15
SEMINOLE	San Francisco	Kurrachee & Bombay	L. Jan. 6
SILVERLIP	Cardiff	Balekpappan	P. Perim, Jan. 30
SINGU	—	—	Tr. in East Indies
SNOWFLAKE	Penarth	Novorossisk	P. Gibraltar, Jan. 28
SOPHIE	Kustendje	Alexandria	Arr. Jan. 23
SPONDILUS	Blexen	Cardiff	Arr. Jan. 27
STANDARD	Philadelphia	Hamburg	Arr. Jan. 27
STROMBUS	Cardiff	New York	P. Barry Island, Jan. 22
SURAM	Tyne	Philadelphia	L. Jan. 23
SUWANEE	London	Philadelphia	Arr. Jan. 27
SVIET	Batoum	Odessa	L. Dec. 26
TELENA	Hong Kong	—	At Singapore, Jan. 28
TEREK	Hamburg	New York	Arr. Jan. 30
TIFLIS	Batoum	Hamburg	P. Sagres, Jan. 29
TIOGA	Manchester	Galveston	Arr. Jan. 24
TONAWANDA	San Francisco	Shanghai	L. Jan. 18
TROCAS	Yokohama	—	L. Jan. 25
TURBO	Barry	Batoum	P. Peniche, Jan. 26
TUSCARORA	San Francisco	Shanghai	Arr. Jan. 15
TWINGONE	Rangoon	Calcutta	L. Jan. 16
VEDRA	Manchester	Penarth	Arr. Jan 28
VILLE DE DIEPPE	—	—	In Port Havre, Jan. 23
VILLE DE DOUAI	Hull	Philadelphia	Arr. Jan. 25
VOLUTE	Nagasaki	Kobe	Arr. Jan. 28
WASHINGTON	Kustendje	Bombay	Arr. Jan. 26
WEEHAWKEN	Belfast	New York	Arr. Jan. 19
WILLKOMMEN	New York	Rotterdam	L. Jan. 23
WINNEBAGO	Shimonoseki	San Francisco	L. Jan. 13

Latest Market Intelligence.

LONDON OIL MARKET.

Supplied by Messrs. Benjamin & Gee, 31, St. Mary Axe, E.C.

February 1st, 1907.

There are one or two small re-sale parcels of Russian petroleum on the market which are offering at 6d. but the importers price for refined oils are unchanged as follows:—Russian and Roumanian, 6¼d.-6⅜d.; American, 6¾d.-6⅞d.; Water White, 7¾d.-7⅞d.

LUBRICATING OILS

American oils have increased in price 7s. 6d. per ton, the latest quotations being as follows:—

American pale, £7 7s. 6d. to £11.
American dark cylinder, from £7 12s.
American filtered cylinder, from £11.
Shellene, £5
No. 1 Russian, £10 7s. 6d.

TURPENTINE.

American Turpentine is still very firm and has again increased in price being quoted for Spot, 51s. 9d. and for March/April 52s. 3d.

LIVERPOOL OIL MARKET.

January 31st.

Refined oils are quiet, and sellers quote 6½d. for Russian, Galician or Roumanian; and 6⅝d. to 7⅝d. per gallon for American.

PETROLEUM SPIRIT continues at 1s. 0½d. to 1s. 3d. per gallon for American deodorised, according to quality on the spot.

LATEST AMERICAN PRICES.

NEW YORK, January 31st.

Refined, in cases, is steady at 10·10 Standard White, 7·60; Credit balances, 1·60c.

PHILADELPHIA, January 31ts.

Standard White is still quoted at 7·45.

RUSSIA.

BAKU, January 26th.

The Baku oil market is firm. Light crude oil, spot, 24¾ copecs per pood; residuals, in ships, spot, 26¾; for delivery during navigation months, 27 copecs; kerosene, in waggons, 27 copecs.

BELGIUM.

ANTWERP, January 23rd.

The petroleum market is stronger. Price of Standard White, spot, 20½ francsper 100 kilos; February, March and April 20¾ francs.

FRANCE.

PARIS, January 25th.

Illuminating oil is quoted in bulk, in whole tank waggons, 22 francs per hectolitre; spirit, 28 francs per hectolitre. Special white oil, 30 francs per hectolitre.

GERMANY.

HAMBURG, January 25th.

The kerosene market is firm. The price of American Standard White is 6·80 marks per 50 kilos, Russian, 6·55 marks.

ROUMANIA.

January 26th.

	Francs.
Crude oil from different fields, including pipe line charges, per 100 kgs.	4·00-4·10
Refined oil, exclusive of taxes	13·00- —
Motor benzine, including taxes	16·00-18·00
Benzine, doubly refined	24·00-25·00
Residuals in tank waggons, at refinery	3·20-3·30
Paraffin	120·00-125·00
Lubricating Oils—	
Agricultural...	30-32
Prime	35-37
Extra	40-42
Royal	45-46

In barrels free on rail including octro tax of 12 fcs. per 100 kilos

PRICES FOR EXPORT.

Refined oil in tank waggons, per 100 kgs.	8·50- —
Benzine, sp. gr. 0·710-0·715	15·50-16·50
,, sp. gr. 0·720-0·725	14·50-15·50
,, sp. gr. 0·730-0·740	11·50-12·50
,, sp. gr. 0·745-0·755	7·50- 8·50

INDIA.

BOMBAY, January 10th.

Petroleum is steady.

Standard Oil Co., of New York.

Current rates are:—

American, "Snowflake," 150 deg.	Rs. 6	0	2
,, Chester, 125 deg.	4	8	2
,, Monkey Brand, 125 deg.	4	0	2
,, Bulk, 125 deg. (in local made tins)	3	10	0
,, ,, 125 deg. (8 Imperial gallons)	3	0	0
,, "White Camelia" brand, 125 deg.	No stock.		

The Asiatic Petroleum Company, Limited.

Current rates are:—

"Swan" Brand oil, in tins, per pair	3	2	0
Sumatra "Rising Sun," bulk, per unit	3	0	0
,, ,, tins, per pair	3	10	0
Silverlight cases, per case	4	8	0
Sumatra, "Anchor" per case	4	14	0

TRANSLATIONS.

TECHNICAL, Legal and Commercial Translations from and into Russian, German, French, etc., undertaken with accuracy and dispatch by—

S. JOLSON,

126, COPTHALL HOUSE, COPTHALL AVENUE, E.C.

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IMPORTS of PETROLEUM into UNITED KINGDOM

Specially prepared for this Journal by the Custom House.

FOR THE WEEK ENDED JANUARY 21ST, 1907—

Date.	Port and Importers.	Description.	No. of Gals.	Port Whence.
Jan.	London—			
15	W. B. Dick and Co...	Lub.	5.380	Philadel.
16	Fielder, Hickman and Co...	,,	30,780	,,
16	A. Brown and Co.	,,	3,600	,,
16	Scott's Wharf	,,	3,000	New York
16	London & India Docks Co..	,,	800	Hamburg
16	Fielder, Hickman and Co...	,,	2,400	Stettin
17	,,	Lub.Gr.	2,120	Ghent
17	T. H. Lee	Lub.	2,370	Hamburg
17	G. W. Sheldon and Co.	Lub. Gr	1,520	New York
17	A. Brown and Co.	Lub.	2,400	Philadel.
18	Worthington and Boler	,,	4,400	,,
21	McDougall and Boulton	,,	5,740	,,
21	Anglo-American Oil Co.	,,	15,000	,,
21	Consolidated Petroleum Co. (Batoum)	Gas	1,275,000	,,
21	G. W. Sheldon and Co.	Lub. Gr.	1,020	New York
	Liverpool—			
15	Geo. B. Taylor	Lub.	53,200	Philadel.
15	American Line	,,	7,000	,,
14	George B. Taylor	,,	20,000	New York
15	Liverpool Storage Co.	,,	4,800	,,
15	Pickford's, Ltd.	L. Paste	490	Hamburg
15	Dee Oil Co.	Lub.	240	,,
16	Huxley and Co.	,,	600	,,
16	Vacuum Oil Co.	,,	8,000	Philadel.
16	Bramwell, Fern and Co.	,,	470	New York
17	W. H. Knott and Sons	L.Paste	360	Hamburg
17	Meade-King, Robinson & Co.	Lub.	30.520	,,
17	,, ,,	Resid.	10,000	Trieste
17	Vacuum Oil Co.	Lub.	16,400	New York
19	Ismay, Imrie and Co.	,,	1,280	,,
21	Burnaby and Chantrell	Lub.Gr.	560	,,
21	Liverpool Storage Co.	Lub.	91,760	,,
21	,,	M.Colza	3,960	,,
21	Geo. B. Taylor	Lub.	5,400	,,
21	W. B. Dick and Co.	,,	25,260	,,
21	Valvoline Oil Co.	,,	7,010	,,
21	,,	,,	9,430	,,
21	Cunard Steamship Co.	,,	3,000	,,
21	Meade-King, Robinson & Co.	,,	7,200	Baltimore
21	,, ,,	,,	11,280	Philadel.
21	W. B. Dick and Co.	,,	18,920	,,
21	Worthington and Boler	,,	6,500	,,
21	Crew, Levick and Co.	,,	13,710	,,
21	,,	M.Colza	7,210	,,
	Bristol—			
15	Pickfords	Lub.	950	Hamburg
15	H. Pritchard and Co.	,,	260	,,
15	Ford and Canning	,,	1,000	Hamburg
15	,,	,,	2,400	New York
16	Anglo-American Oil Co. (Bloomfield)	Lamp	1,124,740	Philadel.
16	,, ,,	Gas	225,770	,,
16	,, ,,	M.Colza	227,640	,,
18	H. R. James and Sons	Lub.	13,360	New York
18	,,	M.Colza	560	,,
18	W. Smith and Co.	Lub.	43,400	,,
18	Anglo-Bosphorus Oil Co.	,,	4,000	Hamburg
	Grimsby—			
17	J. Sutcliffe and Son	,,	320	,,
	Hartlepool—			
17	Hartlepool Steam Nav. Co.	,,	360	,,
	Hull—			
17	Hull & Netherlands S.S. Co.	Tar Oil	7,200	Rotterdam
17	W. Gilyott and Co.	Lub.	62,120	New York
17	Wilsons and N.E. Railway Shipping Co.	,,	2,400	,,
17	,, ,,	,,	520	Hamburg
17	,, ,,	,,	640	,,
17	,, ,,	,,	320	Antwerp
17	,, ,,	,,	400	,,
17	,, ,,	,,	480	Ghent
19	,, ,,	,,	2,400	Stettin
19	Consolidated Petroleum Co. (Suram)	Lamp	870,400	New York
	Manchester—			
17	Anglo-American Oil Co. (August Korff)	,,	291,090	Philadel.
17	,,	Lub.	428,360	,,
19	Worthington and Boler	,,	2,000	,,
19	Manchester Liners	,,	1,000	,,
19	W. Hodgson and Co.	,,	870	Hamburg
21	General Petroleum Co. (Scandinavian)	Kerosene	140,700	Antwerp
	Newcastle—			
18	Tyne-Tees Steamship Co.	Lub.	3,040	,,
	South Shields—			
18	Consolidated Petroleum Co. (Suram)	Lamp	100,000	New York
	Dundee—			
17	D. Alexander and Sons	Crude	200	Hamburg
	Grangemouth—			
18	W. Graham-Yooll and Co...	Lamp	2,600	,,
18	J. Currie and Co.	Lub.	800	,,
21	,,	,,	4,000	,,
21	,,	Tar oil	400	,,
	Leith—			
15	J. Currie and Co.	Lub.	680	,,
15	W. Graham-Yooll and Co.	Lamp	8,720	,,
17	,,	,,	7,240	,,
17	,,	,,	5,580	,,
19	J. Currie and Co.	Lub	200	,,
19	,,	,,	200	Stettin
	Belfast—			
15	Consolidated Petroleum Co. (Caucasian)	Gas	819,200	Philadel.
17	,, (San Christobel)	Lamp	835,000	New York
	Total for Week		6,963,610	

MIDLAND RY-CARRIAGE & WAGON CO., LTD., & Reduced.

Midland Works,

BIRMINGHAM.

—BUILDERS OF—

OIL AND OTHER

TANK WAGONS,

And Every Description of Rolling Stock

With WOOD or STEEL UNDERFRAMES.

Anglo-American Oil Co., Ltd.,

SOLE IMPORTERS

Finest American Lamp Oils

WHITE ROSE

. and .

ROYAL DAYLIGHT.

Pratt's Motor Spirit

PACKED IN SEALED TWO GALLON CANS.

Universally used by all leading Motor Manufacturers, Motorists, Railway and Motor Bus Companies.

IN USE AND FOR SALE EVERYWHERE.

QUALITY TELLS.

To Dealers only.

FOR THE WEEK ENDING JANUARY 28TH, 1907—

DATE.	PORT AND IMPORTERS.	DESCRIPTION.	NO. OF GALLS.	PORT WHENCE.
Jan.	LONDON—			
22	Mordaunt Bros.	Lub.	6,500	New York
22	Humphrey and Co.	,,	6,640	,,
22	E. and T. Pink	,,	5,000	,,
22	Fielder, Hickman and Co.	,,	3,600	,,
22	,,	,,	2,400	Philadel.
22	,,	,,	2,800	Stettin
22	J. L. Lyon and Co.	Turps Sub.	420	Antwerp
22	Schenker and Co.	Lub.	670	,,
22	G. W. Sheldon and Co.	,,	1,060	,,
22	H. Finkler and Co.	,,	1,900	Fiume
23	London and India Dock Co.	,,	2,200	Hamburg
23	Anglo-American Oil Co.	,,	26,000	New York
23	Grindley and Co.	,,	2,000	,,
24	Craven and Co.	,,	100	Hamburg
24	London and India Dock Co.	,,	750	,,
24	T. H. Lee	,,	210	,,
25	G. W. Sheldon and Co.	,,	280	Antwerp
26	Felton and Crespin	Turps Sub.	170	,,
28	Grindley and Co.	Lub.	11,000	Philadel.
28	Wilkins, Campbell and Co.	,,	2,600	,,
	LIVERPOOL—			
22	American Line	,,	1,250	,,
22	Crew, Levick and Co.	,,	3,240	,,
22	George B. Taylor	Lub.Gr.	4,000	,,
22	E. H. Kellogg and Co.	Lub.	2,000	New York
22	Meade-King, Robinson & Co.	,,	4,000	,,
22	J. Light and Son	,,	1,000	,,
22	Pickford's, Ltd.	L.Paste	480	Hamburg
24	Liverpool Storage Co.	Lub.	3,800	Stettin
24	J. Irvine and Co.	Crude	240	Half Assinie
24	J. Nall and Co.	Lub.	500	Philadel.
25	Meade-King, Robinson & Co.	,,	2,400	,,
25	,,	Spirit	50,180	Rotterdam
28	,,	Lub	2,400	Baltimore
28	Anglo-American Oil Co. (Potomac)	Lamp	606,400	New York
28	,,	Spirit	510	,,
	BRISTOL—			
22	Western Pet. Co. (Turbo)	Lamp	56,500	Hamburg
22	W. G. Clarke	Lub.	370	Antwerp
24	Pickford's	,,	250	Hamburg
26	W. Smith and Co.	,,	39,600	New York
	CARDIFF—			
26	Homelight Oil Co. (Vedra)	Lamp	810,000	Batoum
	HULL—			
22	Homelight Oil Co.	,,	1,077,480	,,
22	Wilsons and N.E. Railway Shipping Co	Lub.	560	Riga
22	,, ,,	,,	2,400	New York
24	,, ,,	,,	2,000	Antwerp
24	W. Gilyott and Co.	,,	19,400	New York
	MANCHESTER—			
22	Geo. B. Taylor	,,	146,000	Philadel.
Jan.				
22	Crew, Levick and Co.	Lub.	23,910	Philadel.
24	C. H. Morton and Sons	,,	960	,,
24	Meade-King, Robinson & Co.	,,	51,160	,,
24	Lamport and Holt	,,	2,940	New York
25	Diamond Lubricating Co.	,,	2,600	,,
25	Homelight Oil Co. (Vedra)	Lamp	675,000	Batoum
26	General Pet. Co. (Rion)	,,	268,400	Kustendje
26	Consolidated Petroleum Co. (Rion)	,,	540,000	,,
26	,, (Kura)	,,	571,200	Philadel.
26	,, ,,	Gas	221,000	,,
	SOUTH SHIELDS—			
26	Consolidated Petroleum Co. (Suram)	Lamp	349,310	New York
	SWANSEA—			
24	Richards, Turpin and Co.	M.Colza	2,000	,,
24	Burgess and Co.	Lub.	340	Hamburg
	GLASGOW—			
22	Anchor Line	,,	27,410	New York
23	J. and A. Allan	,,	45,400	Philadel.
23	,,	M.Colza	10,210	,,
24	Burrell and Son	Lub.	8,000	Trieste
	GRANGEMOUTH—			
24	W. Graham-Yooll and Co.	Lamp	1,200	Hamburg
24	J. Currie and Co.	Lub.	14,160	,,
	LEITH—			
24	J. Currie and Co.	,,	120	,,
24	W. Graham-Yooll and Co.	Lamp	4,360	,,
24	,,	,,	6,800	,,
26	,,	,,	6,540	,,
26	J. Currie and Co.	Lub.	1,010	,,
26	G. Gibson and Co.	,,	1,080	Antwerp
	BELFAST—			
24	G. Heyn and Sons	,,	800	Riga
25	J. C. Pinkerton and Co.	,,	940	Hamburg
28	,,	,,	760	Antwerp
	Total for the Week		5,753,870	
	Total for the past Fortnight		12,717,480	

ENGLISH PATENTS FILED.

Improvements in and Relating to Apparatus for Recovering Lubricating Oils in Marine Engines.—Giovanni Battista and Carlo Baulino, London. No. 1272 of 1907.

Improved Process for Purifying Lubricating Oil and the like and Apparatus therefor.—Carl Steimel, Liverpool. No. 1450 of 1907.

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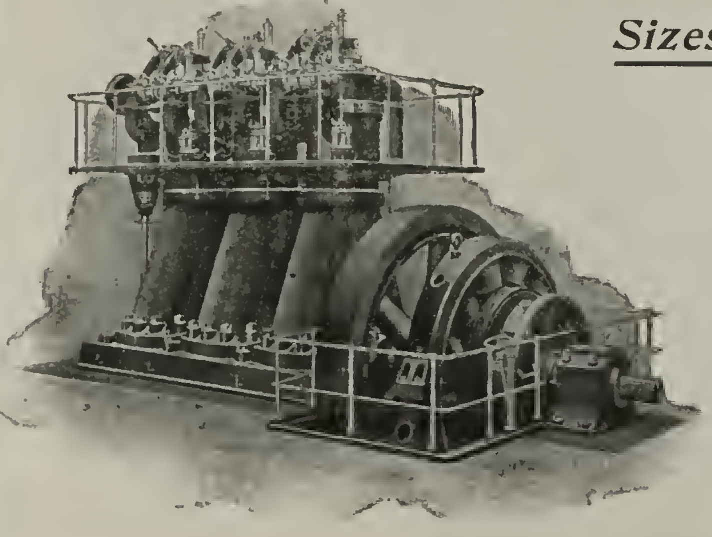

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The Petroleum Review.

By PAUL DVORKOVITZ.

Vol. XVI. *(New Series.)* February 16th, 1907. No. 392.

Editorial Notes.

Munificent Gift to Education by Mr. J. D. Rockefeller.

By his most recent gift, Mr. J. D. Rockefeller, the founder and chief of the Standard Oil Co., has crowned his career, and his contribution over £6,000,000 sterling to the cause of American education has called forth many general and sincere tributes of his munificence. One journal declares that his conceptions of philanthropy are on the same imposing scale as his conceptions of business, and asserts that here, at any rate, there can be no divided opinion as to the wisdom and unselfish purpose of his action. We are confident it will be conceded that the donor had no motive other than to benefit his fellow countrymen, and long after his life story is complete, American education throughout that great Continent will be vitallising work through the assistance which his monumental philanthropy has assured to it.

Batoum and its Petroleum Export Trade.

The year has opened far from promising for the Batoum petroleum export trade, and those who have studied recent events must come to the conclusion that for the first few months in any case its exports of petroleum will be no great advance upon the declining figures recorded of late. Quite contrary to expectations, the exports for the closing month of last year again shewed a decline against the figures of November, this being about 500,000 poods. It is important to note that even with the winding up of old contracts and deliveries, December has failed to liven up the export trade, for notwithstanding the increased deliveries from Baku, and larger stocks, another decline was experienced. The only consoling feature of the present situation is that the case oil trade now shews considerable activity, and for December, consequent upon the increased output of the Mantascheff factory, the total output was brought up to 15,000 cases per day.

January in the American Fields.

The operations in the American fields during January cannot be said to have produced anything in the nature of sensational developments, the wells being drilled, and those completed during the month shewing a substantial falling off even when compared with the December total. The new production also fell away in even greater ratio, a fact which in itself is strong evidence of the poor producing qualities of the ground which is now receiving attention. The total new production for the month in the Pennsylvanian and Oklahoma fields was about 30,000 barrels, or 8,000 barrels behind the figures for December. The Mid-Continent fields still continue to be the centre of great interest, the new wells for January having a daily production of 130 barrels each. It is expected that new work in these fields will shortly experience a great set-back on account of the great danger which now attends the laying of pipe lines—a work which in the past has been for the most part undertaken by the Standard Oil Co.—for a remarkable piece of legislation has been introduced into the Kansas Legislature. If this becomes law, then the State will be enabled to confiscate all the property of the pipe lines doing business in the State—a somewhat sweeping proposal. As may be imagined, such a proposal has already had the effect of putting a stop to pipe line extensions, and one is now beginning to wonder what is going to happen next. So far as we can see, it certainly appears a foolhardy proposal, and one which, whether carried through or not, cannot be looked upon as an incentive to invest additional money in the Mid-Continental fields in the shape of pipe lines to care for the great production.

An Interesting Situation in Roumania.

Quite a stir has been produced in Roumanian petroleum circles on account of the Romano-American Co. having commenced to sell illuminating oils direct to the dealers in various parts of the kingdom. It appears that for many years the sale of illuminating oil in Roumania has been in the hands of a cartel of refiners, the agreements for which are renewed every April. At the time when the cartel was renewed last year, difficulties arose from the fact that two of the principal refineries—the Vega Co. and the Romano-American Co.—did not join the cartel, preferring to retain their liberty of action. Later on the Romano-American agreed in principle to join the cartel, and were allowed a quota in the home market in proportion to the capacity of its refinery. The Vega Co. at first made it a condition of its adhesion to the cartel that the Steaua Romana shall concede to the Credit Petrolifer the exclusive right of selling residuals in the whole country. After protracted negotiations the Vega Co. joined the cartel, waiving their demands. The cartel was then considered as definitely concluded, when the Romano-American Co. declared that it could not join definitely without the authorisation of the headquarters of the Standard Oil Co. in New York. This occurred in September last, and since then the Romano-American Co. has made public no communication as to the reply which it received from New York. During the last few weeks, however, it has been selling independently to dealers. At a recent meeting of refiners a proposal was under consideration to consider the Romano-American Co. as being outside the cartel, and to withdraw the share allotted to it in the home consumption, and divide it among the members of the cartel. That is where the matter at present stands. Some consider the policy of the Romano-American Co. of selling independently is intended to exercise pressure over the cartel to allow it a larger share in the home consumption, whilst others believe that the fact as an indication that the new cartel has no chance of coming into being. Further information regarding the matter will certainly be awaited with interest.

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SERIOUS STRIKES IN THE BAKU OIL FIELDS.

IMPORTANT ACTION BY THE PRODUCERS.

The strike among the workmen throughout the Baku oil fields seems to be growing in importance daily, and now a large number of the producing firms are practically at a standstill. The elected delegates of the workmen have openly declared that they recognise the excessive nature of the demands made, which amount to little less than extortion, but they consider themselves justified in insisting upon them as compensation for the long struggle last year, when they received very little pay. Among the additional demands which have been formulated are those for : (1) 20 to 30 per cent. increased pay : (2) three months' leave each year without loss of pay : (3) eight hours work per day : (4) extra allowances of 50 to 80 per cent. (out of profits) upon annual wages : (5) the granting of advances : (6) payment for strike periods, etc., etc. At the present rate of crude oil production, to satisfy the men's demands would mean an extra cost of production per pood of from five to six copecs or even more, or, in other words, an increased expenditure upon wages of from 100 to 150 per cent.

Recognising the serious state of affairs, the employers are about to present a petition asking that the petroleum industry shall be declared as a national trade, the effect of which will be to make strikes a criminal offence.

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THE TIN PLATE MARKET.

Messrs. Norton, Owen & Co., of 4, Bishopsgate Street Within, London, E.C., report under date 14th February, 1907, as follows :—

At the moment the demand for tin plates is quiet, but nearly the whole of the mills are running full time, and the shipments of tin plates and black plates for January are very satisfactory, amounting to about 44,000 tons, or 11,000 tons more than in the same month of last year. Prices are, however, easier owing chiefly to the market being unsettled in consequence of the recent collapse in the speculative pig iron market, but tin plate manufacturers are unable to obtain any concession on steel bars, the minimum price of which was advanced 5s. per ton by the South Wales Steel Bar Association last week. We make prices of oil sizes to-day as under, but most of the large makers are holding out firmly for the higher figures.

IC	18¾ × 14	124 sheets	110 lbs.	15/1½ to 15/4½ per box.
IC	19¼ × 14	120 ,,	110 ,,	15/1½ ,, 15/4½ ,,
IC	20 × 10	225 ,,	156 ,,	21/3 ,, 21/6 ,,

F.o.b. Wales. Tin lining and iron hooping extra,

◆

The Anglo-Egyptian Commercial Company, Ltd.—A company under this title has recently being registered with a capital of £203,000 for the object of taking over as a going concern the undertaking of the "Societe Egyptienne d'Importation de Petrole." and of establishing two new branches of the trade to be incorporated with the businese in Egypt.

TO PROMOTE THE USE OF LIQUID FUEL IN ITALY.

The new commercial treaty between Italy and Roumania contains a provision of great importance to the Roumania petroleum industry. By this treaty the import duty on Roumanian petroleum residuals is reduced from 8 francs to 0·50 francs. This concession is due to the desire of the Italian Government to promote the use of liquid fuel for industrial purposes in Italy.

No reduction has so far been made in the import duty on crude and illuminating, and the Italian Government, although anxious to reduce the cost of illuminating in order to increase its consumption in Italy, has deferred taking any steps in this direction until the renewal of the commercial treaty with Russia. It has been agreed that Roumanian products shall benefit by any concession which will be made to the Russian petroleum products.

◆

THE USE OF HEAVIER BENZINE FOR MOTORS.

The Anglo-American Oil Co have sent a letter to the press relative to the use of heavier spirit for motor fuel. The letter states that for over six months the company has placed upon the market a motor spirit of ·760 gravity, which, in their opinion, is superior to any other spirit of that gravity now being offered. It is made from Eastern (Sumatra) crude—the entire production of one field of which they control.

From their own standpoint they state they would be delighted if motorists would use that heavy spirit, and as it is sold 1½d. per gallon less than Pratt's or other motor spirits of lighter gravity, there should be an actual inducement to motorists beyond their desire to open up additional sources of supply.

The fact remains (continues the letter), however, that there are a larger number of motor-cars now running in this country, the carburetters of which are adapted only to spirit of light gravities, and in view of the impossibility of a general change of existing carburetters, we shall steadily resist any move to appreciably increase the gravity of our Pratt's brand of motor spirit. For those who can use the heavier grade, it is now, and has been for some months, available, so that it only remains for the motorist to elect which spirit he shall use in his car.

◆

"White" Oil.—The Coon Oil Co., operating near Tionesta, in Pennsylvania, has completed a well which is producing "white" oil in good quantities. One company has offered $3 per barrel for the fluid at the well.

Another Chelsea Refinery.—We learn that another independent refinery is about to be erected at Chelsea. The company which is to build the refinery is stated to have secured control of several thousand acres of oil-producing lands in Indian Territory.

Storms Play Havoc.—A report from the McKittrick oil fields states that the recent heavy storms have flooded many pump holes, and now the loss of thousands of dollars' worth of oil is threatened, for several levees containing 35,000 barrels are expected to give way at any moment.

The Roumanian Petroleum Industry during 1906.

A BRIEF . .
RETROSPECT.

The past year marked an epoch of great progress in every branch of the Roumanian petroleum industry, which has now overtaken and left behind the proportions attained in Galicia, and now occupies the second place after Russia among the petroleum producing countries of Europe.

The full figures of the production of crude oil in Roumania for 1906 are not yet available, for the official statistics for December have not yet been published. It is, however, practically certain that the production in December was larger than in November, and certainly not less than 82,000 tons. This will bring the total production for 1906 up to 878,880 tons against 609,897 tons in 1905, which is an increase of 44 per cent. It is also 10 to 12 per cent. larger than the total production last year of the Galician oil fields.

The steady and continuous growth of the production is shewn in the following monthly figures for the last two years :—

	1906. Tons.	1905. Tons.
January	58,219	42,086
February	55,650	43,853
March	67,464	45,184
April	75,235	46,938
May	76,061	48,539
June	71,729	50,000
July	79,359	51,044
August	76,904	53,101
September	76,124	49,009
October	79,135	62,497
November	81,000	60,789
December	82,000	56,837
Total.. ..	878,800	609,897

In the absence of any detailed statistics it is impossible to comment upon these figures except in a general way. As in former years the vast bulk of the production was obtained in the Prahova district, the principal producing fields in order of importance being Bustenari, Moreni, Campina and Baicoi. Of these four fields Bustenari, Moreni and Baicoi will be found to have largely increased their production, whilst Campina will shew a decline against the output of 1905.

Notwithstanding this great increase in crude oil output there was no over-production, and last year crude oil sold in Roumania at better prices than at any time before. This was due to the completion of the large new refineries of the Vega Co., Romano-American Co., and the enlargement of the refineries of the Aurora Co. and of the Steaua Romana, which refineries required all the crude oil they could get in Roumania to keep them fully employed, and they had to bid against each other for their crude oil supplies. On the other hand the falling off in the exports from Russia has enabled the Roumanian refiners to market their oils in Europe at remunerative prices.

The exports of various petroleum products from Roumania during 1906, compared to 1904 and 1905, were as under (in tons) :—

	1906.	1905.	1904.
Crude Oil, Gas Oil, Distillate, Lubricating Oil, etc.	53,374	49,515	45,204
Illuminating Oil..	196,631	118,134	78,270
Benzine	71,114	46,699	36,969
Total	321,119	214,348	160,443

The total exports in 1906 shew an increase against 1905 by 50 per cent., whilst 1905 in its turn shewed an increase against 1904 by 30 per cent. Taken separately, the benzine exports in 1906 increased against the preceding year by 52 per cent. and those of illuminating oil by 66½ per cent., whilst the exports of crude oil, gas oil, etc., increased by only about 4,000 tons, or 8 per cent.

The prices realised for the kerosene exported in 1906 were satisfactory, whilst those for benzine were excellent. The Roumanian refiners, however, sold most of their benzine in advance in 1905, so that they could not benefit to any great extent by the enhanced price.

The exports to different countries were as under :—

Destination.	Crude oil, gas oil, distillate, etc.	Illum. oil.	Benzine.	Total. 1906.	Total. 1905.
England ..	25,400	52,274	13.588	91,262	22,570
France ..	2,440	49,264	36,139	87,843	118,925
Germany ..	1,939	15,665	20,436	38,040	37,091
Italy	46	34,123	37	34,206	77
Turkey ..	1,010	21,482	32	22,524	7,660
Austria-Hungary	14,861	900	718	16,479	19,240
Belgium ..	832	7,112	—	7,944	87
India	—	5,466	—	5,466	—
Holland ..	50	4,232	11	4,293	—
Tunis	—	3,775	—	3,775	—
Bulgaria ..	1,202	2,106	140	3,448	4,643
Norway ..	3,205	230	—	3,435	2,751
Argentina ..	2,353	—	—	2,353	—
Switzerland ..	13	—	13	26	25
Servia	23	2	—	25	704
Total ..	53,374	196,631	71,114	321,119	214,348

The above figures shew that last year the exports of Roumanian oils to England increased by more than 300 per cent. The largest absolute increase took place in the exports of illuminating oil, namely, by 37,000 tons, whilst crude, gas oil, etc., increased by 10,000 tons. It will be noticed that in 1905 there was no benzine exported from Roumania to England. The exports to France, which in 1905 was by far the largest buyer of Roumanian oils, in 1906 declined by about 30,000 tons, the whole of which falls on illuminating oil, whilst a falling off of 9,000 tons in heavy oils is counterbalanced by an equal increase in benzine. The exports to Germany have remained practically stationary, having increased by less than 1,000 tons; while against an increase of about 1,900 tons in heavy oils and of 2,500 tons in benzine, there has been a falling off of about 3,500 tons in illuminating oil. It is a significant fact that in spite of the enormous amount of capital invested by the German banks in the Roumanian petroleum fields, with the primary object of weakening the position of the Standard Oil Co. in Germany and of the various combinations formed and moves made with that object in view, Roumanian oil is making no headway in Germany, and the position of the Standard Oil Co. there is stronger than ever. It is now left to be seen whether the new combine with the Russian exporters will lead to any different results.

The exports to Italy of 34,000 tons, almost exclusively illuminating oil, stands to the credit of the Romana-Americana Co., the Roumanian subsidiary company of the Standard Oil Co. There is also a very substantial increase in the exports to Turkey, namely, by 15,000 tons or about 200 per cent. Owing to its geographical position it is the natural market for Roumanian oil, and the exports to that country will probably continue to grow.

The following figures of the proportionate participation of the various consuming countries in Roumanian petroleum shew the direction which Roumanian exports are taking, and changes which have occurred in this connection during the last three years:—

	1906. Per cent.	1905. Per cent.	1904. Per cent.
England	28·4	10·5	23·5
France	27·3	55	25
Germany	11·8	17	16
Italy	10·5	—	5
Turkey	7	3·5	1·5
Austria-Hungary ..	5	9	14
Holland	1.3	—	10
Other countries ..	8·7	5	5
	100	100	100

The principal routes by which Roumanian petroleum products are exported are:—Constantza, on the Black Sea; Braila, on the Lower Danube; Giurgevo, on the the Upper Danube, and Predeal on Hungarian frontier.

The respective quantities of various products exported *via* these routes in 1906 were:—

	Crude Oil, Gas Oil, Dis., etc. (tons)	Illum'ing Oil. (tons)	Benzine. (tons)	Total. 1906. (tons)	Total. 1905. (tons)
Constantza..	29,525	177,624	40,143	247,292	128,679
Braila ..	6,047	7,710	11,317	25,074	39,355
Giurgevo ..	1,607	10,460	12,167	24,234	17,708
Predeal ..	14,687	—	1,105	15,792	15,737
Other places.	1,508	837	6,382	8,727	12,869
Total..	53,374	196,631	71,114	321,119	214,348

In conclusion, we consider it of interest to reproduce from the *Moniteur du Petrole Roumain* the following table of exports of petroleum products from Roumania during the period from 1879 to 1906 (in tons):—

	Crude Oil, Distillate, Residuals, Gas Oil, etc.	Illum'ing Oil.	Benzine.	Total.
1879	3,674	—	—	3,674
1880	9,759	—	—	9,759
1881	10,378	—	—	10,378
1882	12,230	1,922	—	13,152
1883	17,550	74	—	17,624
1884	21,724	529	—	22,253
1885	19,919	1,068	—	20,987
1886	14,413	686	—	15,099
1887	16,094	38	—	16,132
1888	18,126	4	—	18,130
1889	18,657	11	—	18,668
1890	11,773	—	—	11,773
1891	18,072	35	—	18,107
1892	19,715	59	—	19,774
1893	17,083	42	—	17,125
1894	16,632	607	—	17,239
1895	15,718	2	—	15,720
1896	17,269	529	—	17,798
1897	21,339	48	—	21,387
1898	27,480	4,523	—	31,733
1899	48,108	14,283	—	62,391
1900	48,899	24,612	4,145	77,656
1901	30,753	16,819	8,300	55,872
1902	23,073	32,291	16,344	71,708
1903	58,723	45,897	21,606	126,226
1904	45,204	78,270	36,970	160,444
1905	49,515	118,134	46,696	214,345
1906	53,374	196,631	71,114	321,119
Total ..	684,254	536,854	205,175	1,426,283

It will be observed that until 1898 crude oil only was exported and this almost exclusively to Austria-Hungary, with small quantities of residuals, distillate, gas oil, etc., to other countries. There is a special treaty arrangement between Roumania and Austria-Hungary whereby Roumanian crude oil to the extent of not more than 20,000 tons per annum is admitted into Hungary at a reduced import duty, for the benefit of the refineries in Southern Hungary. For a long time this export remained stationary at about 20,000 tons per annum, but since the development of the refining industry in Roumania, this privilege has not been taken advantage of to the full extent, and the export of crude oil is on the decline.

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NEW COMPANIES.

Emba Oil and Mineral Syndicate.

£100,000 (£1). To acquire certain oil, petroleum, and mineral-bearing lands and claims and options over petroleum, mineral, and other properties in the Russian Empire and elsewhere, with the benefit of certain contracts relating thereto, and to adopt an agreement with M. Meyer.

No initial public issue. First directors (not less than three nor more than seven): T. H. Honey, 23, Old Broad Street, E.C.; H. Godsal, Gresham Place, London; C. C. Bang, 43, Great Tower Street, E.C., and O. List, Moscow, 200 shares. £100 each per annum (£50 extra for chairman) and 2½ per cent. of distributed profits, divisible. (92,001.)

Coles Motor Spirit Syndicate.

£1,000 (£1). To acquire from S. O. Cowper-Coles the benefit of an application for patents relating to improvements in the production of petroleum compounds with low-flashing points. No initial public issue. Registered without articles. 61 and 62, Gracechurch Street, E.C. (91,947.)

Tustanovice Petroleum Co., Ltd.

Registered on February 6th with a capital of £150,000 (£1) (100,000 preference). The object of the company is to acquire three concessions for the extraction of petroleum and similar products over lands in Galicia (Austria); to sink wells, make borings, and otherwise search for and get petroleum and other mineral oils, and to carry on the business of petroleum and oil refiners and dealers, manufacturers, and vendors of petroleum products, etc. Net profits to be applied as follows:—(*a*) Cumulative preference dividend of 6 per cent. to be paid on issued preference shares; (*b*) 10 per cent. of any balance to be divided between directors; (*c*) a further 10 per cent. to be paid to committee of management and staff of company; (*d*) 20 per cent. of the then remaining balance to be paid as further dividend on preference shares and 80 per cent. as dividend on ordinary shares.

The first directors are:—H.R.H. Prince Miguel de Bragance (chairman), C. Seppe (vice-chairman), A. Eder, Baron F. M. de Weiche-Glon, E. Mendelssohn Bartholdy, and his Excellency Adam Chevalier de Jedrzejowicz. £250. £150 per annum for chairman and £100 for others. 5, Copthall Buildings, E.C. (91,992.)

OIL FUEL ON SHIPBOARD.

THE INSTITUTE OF MARINE ENGINEERS DISCUSS THE SUBJECT.

A very practical paper was read before the members of the Institute of Marine Engineers last week at the Institute, 58, Romford Road, Stratford, E., by Mr. Graydon Hume, who chose for the title, "Oil Fuel on Shipboard."

Mr. W. Lawrie occupied the chair, and there was a large attendance of members, the subject having created widespread interest.

In the course of his paper, Mr. Hume said that oil was an ideal fuel. It was pumped into the bunkers in much the same way as fresh water was taken on board, thus doing away with all dirt and dust. Automatic appliances fed the oil to the furnaces, where it produced an even fire, burnt with very little smoke, increased the output of the boiler, and left no dirt or ashes behind. For a number of years the use of oil fuel was pretty well confined to the Caspian Sea and the rivers in its neighbourhood. The oil, being plentiful, was used extravagantly, and fresh water being plentiful, steam was plentiful for pulverising purposes without any risk of salting up the inside of the boilers, which of itself was an important factor. Of recent years oil had been discovered in various parts of the world, and its use had become more general for marine purposes. Engineers were not slow to recognise that in order to produce satisfactory results, the system of controlling and handling it between the storage tanks and the furnaces was a most important factor. All grades might contain dirt, bits of waste and foreign matter, which were liable to disturb the adjustments of the installation, whose duty it was to deliver the oil to the furnaces regularly, and as nearly automatically as possible.

The successful application of oil to boilers was a strictly engineering feature, and should in no instance be delegated to anyone not familiar with the subject in its various details. Oil was a subtle fuel, a good servant, but a bad master, and anyone desirous of obtaining the best results must neglect none of the details which went to make up a first-class plant. Mr. Hume referred to three designs of oil burners; (1) Using air as an atomising agent; (2) Using steam as an atomising agent; and (3) centrifugal action as an atomising agent. He proceeded to describe in detail the plant essential when using oil fuel. The following letter from a friend of the author who had been associated with oil fuel for the past eight years was read:—

"Great care should be taken to have tanks thoroughly clean before putting oil in. No waste should ever be used for wiping out fuel tanks, for it is bound to give trouble sooner or later, and usually happens in heavy weather when ship is rolling heavily. Anything which will stop the regularity of the flow of oil in the system will cause smoking, and any attention given towards having a clean supply of fuel will be amply repaid. The fact should be borne in mind that any little smoking soon clogs the tubes and runs up the consumption which never lowers again until tubes are swept. The soot is heavy and sticky, and cannot be blown out thoroughly with steam blowers, but must be swept, for which purpose I have found spring scrapers to answer best. It will also pay to see that cargo lines are drains before loading fuel. A little water in oil will make burners work badly, caking up the spray plugs and nozzles so that they shoot the oil out sideways. This is worse with the air system than with steam, and the only remedy is to pull each burner out and clean it. The presence of water can be very readily told by the frying sound with air system, but with steam there is such a roar that the water is not noticed until the burners commence to puff out.

"The fuel loading line should have a strainer with ¼-inch holes in it somewhere, for the refiners are not above having foreign matter in the lines and tanks. If these precautions are taken such a thing as cleaning a burner at sea should never occur. All fuel oil plants should be provided with heater, but with oil used on West Coast this is an absolute necessity with an air plant, and while I never used it with steam, still I do not think it would make a very nice working plant without a heater. With natural draught systems the burners should point so as to converge at about three feet from burner end, and if draught is admitted from below should be pointed down at a slight angle, as the entering draught drives the flame up against the crown of furnace. By far the better way is to allow some of the air to come in from the four quarters of the furnace; this keeps the flame so supplied that it will burn without smoking on a minimum amount of oxygen. No more air should be allowed to enter than will just complete combustion. The way to get at this is on some calm day choke down draught until burners will just make steam without smoking. Under natural draught this will generally be a pressure in furnace of two inches water less than atmosphere. This will be the least amount of air that the plant will run with, and when there is any wind the draught openings can be closed somewhat. This is a very simple matter on paper, but where the firemen are depended on to do the regulating it becomes another matter. Left to themselves or even watched for that matter, they will open the draught to the limit, for it gives them a wider margin to work on, and they can set the burners once for all, and I have yet to see the fireman who was interested in the fuel bill. However, a great deal can be done in the way of improvement in consumption without making it troublesome to get steam without smoking.

"Now with forced draught the matter becomes quite easy, for the fan can be regulated once or twice a watch, and after it has been determined what the difference between the fire-room and ash pan is required to be, and since the furnaces all are regulated with one fan, it is only a question of looking at the water gauge once in a while. With one steamer burning oil it was necessary to carry 2½ inches air pressure at fan. With oil the fan barely turns over in a calm, and where there is any wind the fan is stopped and some of ash pan draughts partly closed, ½-inch negative in ash pan. All retarding of draught should be done at furnace front, and as soon as gases are lit they should be allowed a free path of escape. Theoretically, closing the damper in funnel would have the same effect as closing ash pans, but the plant will not work near so well in practice.

"Another thing which has to be called to many engineers' attention is that the atomising agent is not intended as a jet to increase the draught. Time and again I have seen them, as soon as the steam started down, jump for the compressor and speed it up. If the compressor runs too slow it will cause smoking through the oil not being atomised properly. If it runs too fast it will jet the fire through the furnace and into the back connection, and to hold the steam it will be necessary to open up a little more oil. Of course it is much less trouble to keep steam with a surplus of atomising agent, for it will handle more oil than needed, and for that reason one never sees a compressor running too slow. In practice it is necessary to allow a little margin both in draught and atomising air, but if both of these be limited as far as practicable, then you have the best fire obtainable. Anything that causes smoking should be remedied at once, for it is not the little extra oil that is being burnt at the time—and the smallest quantity more than the burner can handle will do it—but the extra amount needed to penetrate the soot thus formed.

"Smoke or no smoke, the tubes should be swept every two months at least. With some boilers trouble is experienced with back end of tubes leaking, although ferrules will stop this as a rule, and have to be used where the boilers are forced hard; still they retard the draught and are more or less troublesome in this respect, and in small tubes the oil soot soon chokes them. In many cases where trouble of this kind has occurred, cleaning tube sheets and tubes just at sheet has put an end to the difficulty. It is very necessary to keep these parts absolutely clean, and scale that would not be noticed burning coal, will give no end of trouble with oil. I have no doubt that this is on account of the brick work, for on lowering the bricks the tube trouble ceases, but then the stay nuts suffer. The oil pressure on burners should be kept as low as practicable, which is generally about 15 to 25 lb. pressure according to the density of the oil.

"By carrying the pressure low the burner valves can be run almost wide open, and anything that will pass the strainers will go through them, whereas if the pressure be kept higher and burner valves have to be kept shut pretty well off, any little drift that comes along clogs, and it is a continual performance going from one to the other. Almost all beginners believe in a high pressure, and it is hard to make some men who have burned oil before believe that the lower pressure is better.

"I have found it much easier to break in new men and educate them to believe that smoking is a crime, and that they are there to save oil, than to take a man who has been improperly trained and thinks he knows all about it, and cannot see the reason for being so particular. If the oil is to be burned properly and economically, one has to keep a sharp look-out on everything, and old steamship firemen and even some engineers do not take kindly to it."

In conclusion, Mr. Hume then dealt with steam as an atomising agent. In that case large evaporators had to be installed to make good the water lost. Instead of an air-blower there was a steam-pipe led from the auxiliary steam piping system down and along the front of the boilers, with a branch led to each burner having a valve to control the supply at each burner. The table of comparisons, shewing the steaming performances of a cargo steamer, which was included in Mr. Hume's paper, will be found on the next page. This vessel, it was explained, was converted for burning oil fuel early in January, 1905. The same engine-room staff had been in the ship since 1904.

During the ensuing discussion Mr. W. E. Farenden said he understood there were some boats now being built and fitted with steam spray, which was being used in preference to air. Looking at the figures in the paper, he saw that the consumption per i.h.p. per hour of oil was 1·32. That was very good, but he thought with a good quadruple engine they could beat that figure with high-pressure steam. They could get down to that figure, and perhaps a little lower. He believed that some of H.M. cruisers for this year were to be fitted with oil burners. They were, of course, also fitted for burning coal, whenever required.

Mr. John M'Laren asked what use was made of the oil tanks when the vessel was burning coal. Were they used for ballast or were they kept empty? It occurred to him that the cost of putting oil on board might be more expensive than taking in coal, although, on the other hand, the labour of working the oil when on board would be less.

Mr. Britton had heard it stated that the heat in the stokehold when oil was being burned was terrific.

Mr. T. R. Stuart referred to the heavy smoke which was given off from burning oil.

Mr. A. H. Mather said the paper was one of the most practical they had ever had. Mr. Stuart was quite right in his remarks about smoke. The smoke from a naval ship burning oil might be seen for a very long distance. He had had an opportunity of going through the stokehold of a British war vessel whilst liquid fuel was being burnt, and the noise of the oil burners was so great that it was impossible to hear anybody speak. Possibly faulty combustion might have something to do with that excessive noise.

Mr. Hume, in reply, said the naval experiments which had been carried out were confidential, and he could not therefore give any information in regard to them. With regard to Mr. J. M'Laren's question about the maintenance of oil bunkers, he might say that they were built specially strong, of ½-inch plates, and tied with gussets to stand the full head of oil in bunker. The same bunkers were used for coal as for oil. They were cleaned out, scraped and filled with oil, and then the ship went right away on her voyage. After using oil the bunkers would be pumped out, washed and steamed, and then filled with oil. Coming to the commercial aspect of the case, he would recommend any person who contemplated abandoning the use of oil to consider the matter in all its aspects, and to reflect well on the merits of both fuels. So far as the heat in the stokeholds was concerned, he might say that on two or three short trips from London to Dover the heat did not seem to be more than one would find in an ordinary stokehold. The formation of soot, to which reference had been made, was due to an over supply of oil getting into the furnace.

It was decided to continue the discussion next Monday at the Institute.

Comparisons of Fuel.

Name.		Time Steaming		Average I.H.P.	Average Revolutions per minute.	Average Boiler Pressure in lb.	Vacuum.	Consumption per Day.	Consumption per I.H.P. per Hour in lb.	Average Speed per hour.	Mean Average Draught.		Displacement in Tons.
		D.	H.				Ins.	Tons.		Knots.	Ft.	In.	
England— Durham coal	..	14	19	1,654	63	165	22	31	1·7	11·1	17	1½	6,150
Port Said— Welsh coal	..	13	10	1,680	63·5	165	23	31·7	1·7	10·6	21	7½	7,900
Colombo— Indian coal	..	5	8	1,528	62	165	23	32·5	1·9	10	23	2	8,480
Calcutta— Indian coal	..	19	18	1,652	63·3	175	23	35	1·98	10·24	18	8	6,750
Port Said— Welsh coal	..	13	9	1,658	63·4	175	23	30	1·6	10·6	23	9	8,750
Moji— Japan coal..	..	24	0	1,674	63	175	24	32·7	1·8	9·9	17	8	6,340
San Francisco— Oil	..	28	2	1,515	62·3	180	23	24	1·48	8·9	22	10	8,380
San Francisco— Oil	..	25	18	1,550	63·6	180	23	23	1·4	9·6	22	11	8,425
San Francisco— Oil	..	24	14	1,700	66·3	180	23	21	1·35	10·7	23	1	8,490
San Francisco— Oil	..	27	8	1,663	64·5	180	23	22	1·26	8·9	23	1	8,490
Hong Kong— Oil	..	18	10	1,743	68·1	180	23	24	1·28	10·5	14	10	5,250

THE PRODUCTION OF DUTCH-INDIAN PETROLEUM COMPANIES.

The production of crude oil on the properties of the Perlak Petroleum Co. in Sumatra, held on lease by the Royal Dutch Co., and the royalties received from the latter during 1906, compared to 1905, were as under:—

		1906.		1905.	
		Production. Tons.	Royalty. Florins.	Production. Tons.	Royalty. Florins.
1st Quarter	..	55,633	139,082	51,981	129,954
2nd Quarter	..	55,767	139,417	40,047	100,119
3rd Quarter	..	58,502	146,255	47,572	118,932
4th Quarter	..	60,796	151,990	49,995	124,998
Total	..	230,698	576,746	189,598	473,995

The production of crude oil by the Moeara Enim Petroleum Co., of Sumatra, in 1906 amounted to 151,000 tons, against 139,800 tons in 1905.

The production of refined oil by the Royal Dutch Co. in January, 1907, amounted to 813,600 units. The total production of refined oil in 1906 amounted to 10,162,600 units, against 8,476,700 units in 1905, and 6,448,800 units in 1904. These figures include the output of the Sumatra Palembang Co. and of the Moeara Enim Co.

The output of refined oil by the Dordtsche Petroleum Co., of Java, in January, 1907, amounted to 165,000 cases. The total output of refined oil in 1906 was 1,994,450 cases, against 2,007,310 cases in 1905, and 1,989,900 cases in 1904.

The Mines, Bush and Lands Exploitation Co., of Langkat, in 1906 produced 2,118,887 units of refined oil, as against 1,896,077 units in 1905, and 1,694,735 units in 1904.

The Sumatra Palembang Co. in January produced 34,000 units of refined oil. In the whole of 1906, the company produced 574,500 units, against 761,500 units in 1905, and 803,000 units in 1904. Negotiations are now in progress for the definite sale of this company's properties to the Royal Dutch Co., who has hitherto only held them on lease.

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THE DISCREPANCIES IN THE ENGLISH PETROLEUM STATISTICS.

LETTER FROM THE CUSTOMS HOUSE OFFICIALS.

In our last issue we commented at length upon the startling discrepancies between the official petroleum import figures of the Customs authorities and those published by the Board of Trade. We have now received the following letter from the Statistical Office of the Custom House:—

February 8th, 1907.

Sir,—With reference to the weekly returns of petroleum imports into the United Kingdom which are furnished to you by this office, I have to ask that you will be so good as to amend the description lubricating oil incorrectly given therein to lamp oil in the case of the under-mentioned two shipments reported during the year 1905, viz.:—

(1) Return for week ended March 27th, 1906:—2,798,600 gallons imported into London on March 24th, 1906, by the vessel "Narragansett," at New York.

(2) Return for week ended December 3rd, 1906:—2,718,500 gallons imported into London on November 29th, 1906, by the vessel "Narragansett," at New York.

These errors are much regretted, and steps have been taken which will, I hope, prevent a repetition of similar errors in future.—I am, Sir, your obedient servant,

A. J. Wood, Principal.

MISCELLANEA.

PRODUCTION OF CRUDE OIL IN GALICIA DURING DECEMBER.

The following are the official statistics of the production of crude oil at the various oil fields in Galicia during December, and also the stocks at the end of the month (in tons):—

Field.	Production.	Stocks on 31st Dec.
West Galicia—		
Potok	1,410	3 901
Rogi	133	1,116
Rowne	120	177
Tarnawa-Wielopole-Zagorz	1,510	4,747
Krosno	2,475	10,643
Other West Galician fields	2,182	7,745
East Galicia—		
Boryslaw-Tustanowice	48,600	355,306
Schodnica	3,350	13,833
Urycz	1,440	10,301
Mraznica	100	604
Other East Galician fields	1,030	1,362
Total	62,350	409,735

The deliveries of crude oil from the oil fields during December amounted to 58,814 tons, against 79,064 tons in November. The stocks of crude oil at the fields have during December increased by about 6,000 tons.

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THE ENGLISH ADMIRALTY AND LIQUID FUEL.

We learn from official sources that the Admiralty are so gratified with the success which has attended the use of liquid fuel, that they have now decided to make another extensive depôt for the storage of the fuel. The accommodation now to be provided is to be situated on the Medway, and if the present arrangements are carried out storage will be erected for no less than 20,000 tons of liquid fuel at the estuary of the Thames. Four tanks are to be built, each capable of holding 5,000 tons of oil, and each of these is to be surrounded by earthworks as a precaution against possible danger. It is the intention of the Admiralty to bring the tank steamers alongside dolphins with connecting works so arranged as to afford a berthage 400 feet long. Gangways will connect the dolphins with the shore, and under these will run pipe lines leading to the storage tanks. The berthage will be such that the largest of the Admiralty's warships may comfortably run alongside for its fuel supply at any state of the tide.

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MANCHESTER PETROLEUM IMPORTS FOR JANUARY.

The current issue of the "Port of Manchester Official Shipping Guide for February" states that during January, the tankers "Vedra" and "Erivan," from Batoum, "Potomac," "August Korff" and "Kura," from Philadelphia, and the sailing vessel "Scandinavia," from Hamburg, discharged an aggregate quantity of 20,000 tons of oil into the tanks of the various distributing oil companies below Mode Wheel Locks, on the Canal.

ROUMANIAN PRODUCTION DURING NOVEMBER.

According to provisional figures to hand, the production of crude oil at the various Roumanian oil fields in November, compared to October, was as under (in tons):—

	November.	October.
Prahova District—		
Bustenari	45,308	46,093
Campina-Poiana	8,958	7,060
Moreni	18,147	17,589
Baicoi-Tinta	3,889	4,386
Other fields	722	784
Total for Prahova	77,024	75,912
Dambovitza District	2,070	1,523
Buzeu	—	903
Bacau	768	797
Total	79,862	79,135

To the above approximate figures for November, about 1,500 tons has to be added to allow for the firms who have not yet made their returns, which will bring the total for the month to more than 81,000 tons, against 79,135 tons in October, and 60,789 tons in November, 1905.

The production of the leading firms in November was as under:—

	Tons.
Steaua Romana	24,927
Regatul Roman	13,586
Bustenari Co.	11,961
Romano-American Co.	4,858
Telega Oil Co.	3,783
International Co.	3,302
Colombia Co.	3,051
F. M. Pleyte	2,060
Trajan Co.	1,598
Aquila Franco-Romana	1,256
Arnheemsche Petroleum Co.	1,032
Grigorescu and Vladescu (Naphta)	829
Seceleanu Bros.	742
Galo-Romana Co.	651
V. E. Grigorescu and G. Stroe	555
Olandeza-Romana Co.	545

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NOVOROSSISK PETROLEUM SHIPMENTS.

The total shipments of petroleum products from Novorossisk during the first eleven months of 1905 amounted to 6,174,954 poods, against 13,852,360 poods in the corresponding period of 1905. Of this total exports represent 3,855,887 poods, against 11,646,988 poods in 1905. The exports this year include 2,394,547 poods; kerosene (against 9,150,285 poods in 1905), 560,062 poods residuals (1,318,337 poods); benzine, 481,433 poods (492,981 poods) and ligroin 419,845 poods (249,319 poods). The origin of these oils is shewn in the figures of deliveries to Novorossisk during the eleven months from Baku and Grosny, which were 1,805,968 poods and 4,091,377 poods respectively. The deliveries from Baku shew a decline against 1905 by 6,000,000 poods, whilst deliveries from Grosny have declined only by about 600,000 poods. Baku contributed only kerosene and residuals, whilst the benzine and ligroin came exclusively from Grosny.

CALIFORNIAN PETROLEUM REFINERIES.

GENERAL MEETING OF SHAREHOLDERS.

The annual ordinary general meeting of the shareholders in the Californian Petroleum Refineries, Ltd., was held last Friday at Winchester House, Old Broad Street, London, E.C., Mr. SIMON SYMONS taking the chair.

The CHAIRMAN, in moving the adoption of the report and balance-sheet, said it was a matter of great regret to the Board that they could not issue their report and the statement of accounts earlier. That was due entirely to the lateness at which they were received from San Francisco. Their directors had hoped that the refinery would have been finished and in operation before the present time, but the great calamity which occurred in San Francisco in the earthquake and the subsequent fire, had resulted in the destruction of their offices, books and records, and also the manufactories on which they were dependent for having their contracts completed for building the refinery. Consequently everything had to be done again *de novo*, and he took that opportunity of paying a tribute to the well-known characteristic of Americans, of being very quiet under adversity, and of not losing the energy which was necessary to retrieve such a position. The company's board in San Francisco had certainly given splendid proof of that, because scarcely were they down than they were on their legs again, and commenced the business of reconstruction.

As regarded their operations, it would be seen that their estimates would be exceeded. He much regretted that although it was a very usual occurrence, but it was partly due to certain contracts which they had made not being fulfilled, and they had to make contracts at higher prices, labour being very scarce at San Francisco, where, through the trades unions, people could apparently command any price they liked. In building their refinery, thanks to the delay that had occurred, many new inventions in the way of refining having come forward, they had thereby been enabled to build a refinery which would be thoroughly up-to-date, and he was perfectly certain that the refinery would be capable of doing anything that could be expected of such a refinery. They were very happy in having engaged as their engineer and manager of the refinery Dr. Gurgenianz. He had been occupied in the refinery of one of their directors, Mr. McGarvey, who was a great authority; and he, having known Dr. Gurgenianz in his own business, could strongly recommend him. As regarded the money they had spent, they were obliged, through certain reasons, to abandon the original idea of Port Sal, but they bought land at a cost of about £8,000 at another part of the coast, better situated, and which was called Oil Port.

In order to get the oil there the Graciosa Oil Co., from whom they took their oil, constructed, at their own expense, a pipe line. The Graciosa Oil Co. spent $275,000 of their own money on that pipe line to bring the oil to the refinery. Their company had to construct a wharf about 1,400 feet long, which he thought would cost about £12,000 or £14,000. They had also to construct a manufactory to make tin boxes, so that they would not be obliged to pay any price which other manufacturers there would like to charge, while they would very likely have to construct the means of making asphalt out of the residuum of petroleum.

In conclusion, the Chairman said that only the previous day they had concluded certain contracts in Japan for getting rid of a great part of the products they were going to obtain from their distillery, and he had every reason to believe that through those contracts the company would be able to make very good profits, and, consequently, very good dividends for the shareholders. He then moved the adoption of the report and balance sheet.

Mr. W. H. McGARVEY seconded the motion, and this being put was carried unanimously.

Mr. THEOPHILUS then moved the re-election of the two retiring directors—Messrs. Thomas Stoker and Mr. Charles Symons—and this was seconded by Mr. MACRORIE.

The two San Francisco directors of the company—Messrs. Liebes and H. J. Crocker—then addressed the shareholders regarding the progress accomplished thus far, and spoke in very optimistic strains regarding the prospects. Mr. Crocker spoke of the refinery of the company at Port Harford, and commented upon the many advantages this position had over the first selected spot, where there are already several other independent pipe lines centering. Their new refinery was now situated at the mouth of several of the large oil districts in California from which pipe lines run, and so they would be entirely independent of any one source of oil.

The meeting closed with the usual votes of thanks.

MR. J. D. ROCKEFELLER AND AMERICAN EDUCATION.

A MUNIFICENT GIFT.

As a munificent philanthropist Mr. J. D. Rockefeller has crowned his career by giving the world's record gift of £6,500,000 to the cause of American education. This gift has been made to the General Education Board, which was created four years ago to administer the Rockefeller charities in the cause of education. Added to the sum which Mr. Rockefeller has already placed at the disposal of the Board, his contribution now announced makes the stupendous sum of £8,600,000.

Of the £6,500,000, one-third is to go into the permanent endowment fund of the General Education Board, and two-thirds is to be applied to certain specific purposes, by the direction of Mr. Rockefeller or his son, John D., jun. The precise nature of these specific purposes has not been made public, but, in a general way, it was stated that the interest on the fund is to be used in keeping colleges and schools, not only in the south, but in all parts of the United States.

In accepting the gift, the Board wrote a letter to Mr. Rockefeller, saying:—

"This is the largest sum ever given by a man in the history of the race for any social or philanthropic purposes. The board congratulates you upon the high and wise impulse which has moved you to this deed, and desires to thank you in behalf of all educational interests whose development it will advance, in behalf of our country, whose civilisation for all time it should be made to strengthen and elevate, and in behalf of mankind everywhere in whose interests it has been given and for whose use it is dedicated."

Including the latest gift of £6,500,000 to promote the general cause of education throughout the United States, Mr. Rockefeller has now given over £18,500,000 for educational or benevolent purposes. The list of his chief donations is as follows:—

	£
General Educational Fund	8,600,000
Chicago University	3,578,000
Rush Medical College	1,200,000
Barnard College	275,000
Southern Educational Fund	225,000
Yale University	200,000
Harvard University	200,000
Baptist Missionary Fund	275,000
Juvenile Reformatory of New York	200,000
Young Men's Christian Association	179,000
Union Theological Seminary	220,000
Teachers' College of New York	100,000
Vassar College	80,000
Brown University	65,000
Cornell University	50,000
Bryn Mawr College	46,000
Rockefeller Institute for Medical Research	40,000
Newton Theological Seminary	30,000
Adelphi College	25,000
Children's Hospital in New York	25,000
Syracuse University	20,000
Smith College	20,000
Wellesley College	20,000
Columbia University	20,000
Denison College, Granville, Ohio	20,000
Furman University, Greenville, South Carolina	20,000
Case School of Science, Cleveland, Ohio	40,000
University of Virginia	20,000
Johns Hopkins University	100,000
Rochester Theological Seminary	140,000
Young Women's Christian Association	20,000
Gifts prior to 1892, exclusive of Chicago University	1,400,000
Gifts to Churches and Personal Charities	507,000

THE VARIOUS BENZINES ON THE RUSSIAN MARKET.

INVESTIGATION BY MR. RAKUSINE.

Writing in *Petroleum*, upon the above subject, Mr. M. Rakusine defines first of all what he understands under the term of benzine, namely, the fractions of the crude oil, which distil over before the kerosene fractions are reached, and amongst such are, raw or refined : petroleum ether, the benzine proper, ligroin, rigoline, gasoline, cleaning oil, etc.

The refining of benzine is done with the object of removing its colour and also the bad odour, which is due chiefly to the presence of organic sulphur compounds, and is particularly noticeable in the two principal kinds of benzine on the Russian market, that of Grosny and Bebe-Aibat. There can be no question that the most rational way is to treat benzine in the refineries at the place of the crude oil production.

The yield of benzine from various crude oils, Russian and others, varies very widely. Tests made by the author gave the following results:—

Crude oil from—	Limits of Boiling Point.	Specific Gravity at 15° C	Yield of Benzine in per cent. by weight.
Anapa (Caucasus) ..	45—125° C	0.7371	27 79
Berekei ,, ..	85—120° C	0·7275	2·88
Bebe-Aibat ,, ..	40—120° C	0·7469	4·88
Campina (Roumania) ..	45—120° C	0·7162	3·41
Pennsylvania ..	80—110° C	0·7225	11·45
Tchimion (Central Asia)	65—120° C	0·7019	6·20

Ordinary Baku crude oil yielded only 0·2 per cent. and Grosny crude oil 4·6 per cent. of benzine distillates.

The distillation of benzine is done in a simple way ; only care must be taken to get a proper condensation, and a proper collection of the benzine residues from the water separators. The most important fractions are:—

Petroleum ether .. .. spec. grav. at 15° C = 0·635—0·685
Light benzine .. .. ,, ,, ,, = 0·700—0·715
Benzine for fat extraction ,, ,, ,, = 0·720—0·735
Ligroin, or benzine residues ,, ,, ,, = 0·735—0·750

For the refining of benzine, Mr. Kharitchkoff proposes to use a chromate mixture (sulphuric acid with 0·1—0·2 per cent. on the benzine of chrome acids in the form of potash salts, when in any case an addition of 0·011 per cent. of oxide of lead becomes necessary) or with fuming sulphuric acid. The use of animal charcoal or of aluminium hydrosilicate is out of the question, as there can be no stirring or agitating with air.

Benzine is the more valuable, the greater the proportion of light boiling fractions in it. This proportion increases slightly by refining. Petroleum ether and light benzine are used chiefly for benzine motors ; ligroin is used for cleaning purposes and as a solvent for various purposes, as for instance in the rubber industry. The heavier benzines are used chiefly for extraction purposes and partly also as fuel.

Benzines vary from each other in their specific gravity and boiling points, but all kinds of benzine must possess the following properties : when poured out on a filter paper, it must evaporate and leave no lasting bad odour.

LATEST INFORMATION FROM THE GROSNY FIELDS.

The past year has ended with a smaller crude oil production at Grosny than the preceding twelve months. No definite figures of production have yet been made public, but it is estimated that the decline against the preceding year will amount to about 3,000,000 poods. In this connection it must be borne in mind that in 1906 there were only 11 working months, one month having been taken up by a strike.

At the beginning of the current year a new plot has been added to the producing area, *i.e.*, No. 40, formerly Baskakoff, now exploited by the Spies Petroleum Co. The old borehole there has been completed and yields 2,500 poods daily. A second well will be completed shortly, there being altogether six boreheles on this plot. The St. Petersburg Co., which operates on one of the worst plots, Mamakaeff, No. 976, wished to replace it by plot 12 in the eastern region, but the Terek Cossack Administration declined to grant this request. Mr. Strijoff, a well known local petroleum mining engineer, offered to lease plot No. 976 by private treaty, but this was refused by the Cossack Administration. The successors of Maximoff are preparing to drill two wells on plot No. 26 ; on plot No. 15 they are starting alongside their well (the deepest in Grosny, 2,912 feet), a second well intended to reach the same depth. The Spies Co. propose to extend their operations in 1907 on the two plots taken over from the Grosny Oil Co.; at present they are working there two old wells, and are getting about 2,000 poods daily.

On the property of the Alkhan Yurt Co., now worked by successors of Maximoff, a new well will be completed shortly which is expected to yield good results. Generally, greater animation has lately prevailed at the Grosny oil fields.

THE PETROLEUM INDUSTRY IN HANOVER.

In spite of the slow progress achieved by the efforts hitherto made to consolidate the various interests in the petroleum industry of Hanover, the opinion prevails that the movement in this direction will lead to tangible results in the near future. At a meeting of a local petroleum company held recently it was stated that the absorption of the smaller enterprises by the large companies was probable.

The price of crude oil has lately been advancing and has now reached 8 marks per 100 kilos, which is 1·50 marks higher than at the same time last year. The development operations in Hanover continue unabated, and along with it the production is also increasing. According to the official statistics which have just been published, the total production of crude oil at the Hanover oil fields in 1905 amounted to 59,196 tons, against 57,741 tons in 1905. At the end of 1906 there were in the Clausthal mining district 35 petroleum concerns, of which three are in the Hildesheim district and 32 in the Lüneburg district. The average number of men employed in 1906 was 881, against 823 in 1905. The deliveries of crude oil from the oil fields increased from 50,896 tons in 1905 to 66,316 tons in 1906.

THE LIFE STORY OF PROF. D. I. MENDELEEFF.

By Dr. P. DVORKOVITZ.

I am but expressing my thoughts in a mild way when I say that I exceedingly regret that it becomes my sad duty to say a few words of the good work accomplished by that truly great scientist—Prof. D. I. Mendeleeff—whose decease occurred a few days ago at St. Petersburg. It is a very sorrowful duty to bring before one's mind's eye the chief characteristics of a great man's work, when death has already played its part, but it is particularly so in the present case, for in Dmitri Ivanovitch Mendeleeff I have recognised more of the friend than the brother chemist. The petroleum industry always had a fascination for him, and this was why to the very last he displayed a great interest in every investigation in reference to petroleum hydrocarbons.

It is almost a quarter of a century ago since I became well acquainted with the now deceased professor. It was at a meeting of the Russian Chemical Society at the University of St. Petersburg, and to the members I was introduced by three of the greatest scientists of the day—Prof. Markovnikoff, Prof. Mendeleeff, and Prof. Menschutkin. How sadly strange that the two last-named gentleman should be called "across the bar" within a few days of each other! And what a void has been created in scientific circles by their removal!

Of Prof. Mendeleeff it can truly be said that he belonged to all nations, and though Russia claimed him almost throughout his active life, his investigations and researches were by no means confined to that Empire. Of Prof. Menschutkin, however, he was less known as one of the leading scientists of the day, though his most important work—"*Analytical Chemistry*"—is valued throughout the world, especially in Germany where he occupied the same position as Fresenius.

Dmitri Ivanovitch Mendeleeff was born in Siberia in 1834, where he received his early education. At the age of fifteen he went to St. Petersburg to complete his education at the University, studying chemistry under Prof. Voskresensky, and physics under Prof. Lentz, very quickly making for himself a name by his investigation on *isomorphism*. Odessa next saw him in the position of a teacher at one of the colleges, and some time afterwards he continued his study at Heidelberg. In 1856 he was appointed lecturer at the University of St. Petersburg, his lectures delivered while in that capacity on organic and theoretic chemistry securing for him a most honoured name among chemical students. Prof. Mendeleeff then became Professor at the Technological Institute in that city, this appointment dating a little after his valuable work upon "The Principles of Chemistry" appeared.

But his great interest in petroleum may be said to date from about 1866, when he paid a visit to the Caucasus, there to investigate the naphtha deposits. As a result of this visit he published a most valuable chapter upon the formation of petroleum in his handbook entitled "The Principles of Chemistry," a publication which has proved to be not only invaluable to the student but is recognised as a work indispensable to the chemist all over the world.

In 1876 he was sent by the Government to make an investigation of the Pennsylvanian oil fields of America, and upon his return, his now famous work upon "The American Petroleum Industry in relation to the Caucasus" was penned. There is no doubt that the services of Prof. Mendeleeff in connection with the petroleum industry have been two-fold. In the first place he was the first to try to form and expound a theory as to the formation of petroleum. He had a love for diving into these hidden secrets of nature, and never did he visit the Caucasus without being struck with the abundance of the petroleum deposits. Why, he asked himself, should petroleum be there so abundantly? And then he furnished the answer, and how logical, and at the same time beautiful it is in expression, I leave my readers to judge, for I intend to publish this *in extenso* in the next issue of the PETROLEUM REVIEW.

I doubt not that his clearly expressed theory has led other scientists to pay attention to this at one time neglected aspect of the petroleum question, for the many works which subsequently appeared upon that of of origin must have been of the greatest possible value to the careful study of the science of petroleum hydrocarbons.

The other influence which Prof. Mendeleeff's services had upon the petroleum industry is that following upon his wide experience in the investigations of the American methods of conducting the petroleum industry, he returned to Russia determined that the Empire should no longer have one of its branches of commerce tied down by such short-sighted and drastic Government restrictions and regulations. His first effort in this direction lay in creating an agitation for the removal of the excise duty of crude oil. Owing to that duty, the Russian refiner in order to reimburse himself, directed his attention to obtain from the crude oil as much illuminating oil as he possibly could, and the consequence was that this was of such bad quality that American oil was then preferred throughout Russia.

After achieving success in this direction, Prof. Mendeleeff proceeded to advocate the building of a pipe line to Czaritzin, and removing the refineries to that town for the interior trade, and to Batoum, to facilitate export trade. It is easy to see that the up-to-date methods adopted in America even at that time had made a great impression upon Prof. Mendeleeff, who was not slow to recognise how far his own countrymen were behind in this respect.

In 1884 when I returned from Baku and visited Prof. Mendeleeff in his laboratory at the St. Petersburg University, I was agreeably surprised to find how great was the interest taken by him in the general welfare of the Russian petroleum industry. With every branch he was very closely acquainted, and to me he expressed his regret that it had been impossible for him to devote so much time to it owing to the special work he then had in hand—the preparation of a book upon the definition of "Acqueous solutions by their specific gravities." But, fortunately, he did not allow pressure of time to prevent his keeping in touch with the petroleum industry, as is seen by the fact that in 1885 he published his work upon the Baku-Batoum pipe line.

The exigencies of space prevent me from giving more than a very brief notice of the more important works of my friend, but I think I have said enough to show not only how valuable his many investigations have been, but his decease will be deplored among the whole body of the scientists of the present day.

LATEST QUOTATIONS OF PETROLEUM SHARES.

ENGLISH COMPANIES.

This list is restricted to companies who have paid dividends or who are producers.

Company	Capital Paid Up.	Value of Shares.	Latest Prices.
Assam Oil	£205,000	£1	$\frac{5}{8}$-$\frac{11}{16}$
Baku Russian Petroleum ..	£750,000 Ord.	£1	2/9-3/3
,, ,, ..	£650,000 $5\frac{1}{2}$% Pref.	£1	5/0-5/6
Bibi-Eybat Petroleum Co. ..			8/6-9/6
Californian Oilfields	£250,000 Ord.	£1	$5\frac{1}{2}$-$5\frac{3}{4}$
Commonwealth Oil Co. Pref	10/- paid up		$\frac{9}{16}$-$\frac{11}{16}$
,, ,, Def..	£1 fully paid		$2\frac{13}{16}$-$2\frac{15}{16}$
European Petroleum.. ..	£550,000 Pref.	£1	2/0-3/0
,, ,, ...	£550,000 Ord.	£1	0/6-1/6
,, ,, ...	£376,000 Deb.	£100	82-85
Russian Pet. & Liquid Fuel ..	£500,000 $6\frac{1}{2}$% Pref.	£1	9/6-10/6
,, ,, ...	£600,000 Ord.	£1	8/6 9/6
Schibaiefl Petroleum ..	£575,000 6% Pref.	£5	$2\frac{1}{4}$-$2\frac{1}{2}$
,, ,, ...	£575,000 Ord.	£1	5/6-6/6
Shell Transport & Trading ..	£2,000,000	£1	$1\frac{7}{8}$-2
,, ,, ,, ..	£1,000,000 Pref.	£10	$9\frac{5}{8}$-$9\frac{7}{8}$
Spies Petroleum Company ..	£312,500	10s.	10/6-11/6

RUSSIAN COMPANIES.

Company	Nom. Value in Roubles.	Quotations on Febuary 11th.	
		Lowest Roubles.	Highest Roubles.
Baku Naphtha Co.	100	547	550
Balakhany Naphtha Co.	250	—	--
Caspian Society	1,000	4,250	4,300
Melikoff, A. C.	250	—	—
Mirzoeff Bros.	250	—	—
Naphtha Co. "Kavkas"	250	—	—
Naphtha Trading Co., A. I. Mantacheff & Co.	250	155	157
Neft Co.	250	180	—
Nobel Bros.	5,000	10,000	10,100
,, ,, ...	250	—	—
Rops and Co. V...	250	—	—
Russian Naphtha Co.	250	170	—
Society Mazout	250	—	—
Tumaieff & Co., J. G.	250	—	—
Volga-Caspian Naphtha and Trading Co.	250	—	—
,, ,, ,, (Second Issue)	250	—	—

SCOTCH COMPANIES.

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Company.	Capital Paid Up.	Value of Share.	Latest Prices.
Broxburn Oil Co., Ltd., Ord. $8\frac{1}{2}$ pd	£19 ,750	£10	22
Do. 6% Cum. Pref. ..	£100,000	£10	$12\frac{7}{16}$
Burmah Oil, Ord.	£1,100,000	£1	60s.
Do. Pref.	£250 000	£1	25s
Dalmeny Oil Co., Ord. (7 paid) ..	£37,800	£8 10s.	£6 16s. 6d.
Do. 5% Pref. ..	£18,900	£7	93s.
Oakbank Oil Co., Ltd., Ord. (17s. pd. 1st issue)	£38,250	£1	42s. 6d.
Do. (17s. pd. 2nd issue)	£131,750	£1	41s.
Pumpherston Min. Oil Co., Ld., Ord (17s. paid)	£110,500	17s.	$6\frac{7}{8}$ $12\frac{3}{4}$
Do. 6% Cum. Pref	£100,000	£10	
Tarbrax Oil Co., Ltd. Ord. (£1 pd.)	£38,350	£1	37s. 9d.
Young's Paraffin Co., Ltd., Ord. ..	£452,808	£4	78s.
Do. "B" Deb...	£150,000	£100	$177\frac{1}{2}$xd

DUTCH COMPANIES.

Company.	Latest Quotations	Former Quotations	Florins.
Arnhemsche Petroleum Mij. ..	—	—	1,000
Aurora ,, ,, (Deb.5%)	$98\frac{3}{4}$	$93\frac{3}{4}$	—
Campina Poiana Mij...	—	19	—
Dordtsche Petroleum Mij. (Pref.) ..	129	131	500
,, ,, ,, (Deb.$4\frac{1}{2}$%)	$102\frac{1}{2}$	$102\frac{1}{2}$	1,000
Gaboes ,, ,, ...	—	—	—
Holl. Rumeensche Petroleum Mij...	35	$35\frac{3}{8}$	1,000
Int. Rum. Pet. Mij.	$103\frac{1}{2}$	$105\frac{1}{2}$	500
Java Petroleum Mij. (Ord.) ..	—	—	1,000
,, ,, ,, (Pref.) ..	—	—	—
Koninklyke Nederl. Pet. Mij. Shares	722	$728\frac{1}{2}$	250-1,000
,, ,, Share certificates	721	$728\frac{1}{2}$	1,000
Mœara Enim Petroleum Mij. ..	$133\frac{7}{8}$	136	100
,, ,, 1-1,000 Oblig. 5	$101\frac{1}{2}$	101	250-1,000
"Moesi Ilir" Petroleum Mij. ..	—	43	—
Nederl.-Rumeensche Petroleum Mij.	16	16	—
Nieuwe Ned. Petroleum Mij. And...	—	—	1,000
Oliebronnen in Hannover Mij. ..	$147\frac{1}{2}$	$147\frac{1}{2}$	—
,, ,, (Deb. 5 %)	96	95	—
Panolan Maatschappij Cert. ..	366	366	—
Perlak Petrol. Mij. (6% cum. pr. A.) ..	156	$162\frac{1}{2}$	1,000
,, ,, (Common) ..	$135\frac{1}{4}$	$142\frac{1}{2}$	—
Sumatra-Palembang Petroleum Mij	$90\frac{3}{4}$	$81\frac{1}{2}$	50
Zuid Perlak Petrol. Mij. (Pref.) ..	$122\frac{1}{4}$	$123\frac{5}{8}$	—

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Saturday, February 16th, 1907.

THE ROAD-DUST NUISANCE AND HOW TO PREVENT IT.

It is a very significant fact that in spite of the outcry which occurs year by year as to that growing, and now very general dust nuisance upon English roads, little or nothing is done by the various authorities to bring their thoroughfares up to a state of perfection which will conform to the altered needs of our times. In the olden days, when motor traffic was unknown, and our country roads were for the most part monopolised by the slow moving horse-drawn vehicles, there perhaps was no necessity to seriously consider methods of improved road treatment, but the advent of the motor car, for both pleasure and business purposes, makes it absolutely imperative that sooner or later our corporate bodies will have to seriously face the problem of road-dust, and devise means in order that the nuisance, if not entirely removed, may be reduced to a minimum.

One might rest contented if our authorities were "up and doing," for then we should have reason for coming to the conclusion that they were alive to the importance of conforming to the altered condition of things, but the remarkable fact is that though this dust nuisance, especially upon our country roads, becomes more acute year by year, and goes not a little way to assist in the spread of several diseases, our town and urban councils for the most part, stand idly by, and marvel at the clouds of dust that passing motors raise. Both as a means of pleasure and business, we all know that the motor-car has come to stay, and consequently it is not enough to condemn this new and growing means of transit and transport simply because the majority of our roadways are not adapted for it. That the authorities must face the problem therefore, is inevitable, and the sooner an improvement is brought about the better it will be for all concerned.

It is true that a few experiments have been made in this country, here and there, to solve the difficulty, and one or two municipal authorities have gone so far as to relay certain portions of their roads with dust-preventing devices, but we are not exaggerating when we say that, speaking generally, no effort has been made by our councils to seriously grapple with this matter, which means so much not only to the general comfort of the population, but to their health.

In striking contrast to the attitude adopted by the English authorities is the method followed by the various administrative bodies in many parts of the United States, and especially California. Though the motor has not made such great progress in America as in the United Kingdom, and is consequently a less familiar feature of traffic in the thoroughfares, our cousins across the Atlantic have seen the advisability of putting their roads in proper order, so that the dangers to which we in this country are subject from the dust nuisance may be prevented. To-day in California there are some hundreds—almost thousands—of miles of roads which have been treated in such a manner as to make them practically dustless, and in view of the necessity which exists in England for the up-to-date treatment of our highways and byeways, it is interesting to briefly give the method which is admitted in America to be the most efficient and also the most economical for the treatment of roads. The utilisation of oil in connection with this work of rendering roads dustless has for years been recognised, and the whole of the special preventatives recommended for this purpose, of which not a few have found their way to this country, have oil as their main ingredient.

The usual method adopted in California in making a thoroughfare dustless is very simple. The road is first of all brought down to a clean, round grade. The dirt is made fairly fine, a spading harrow being used, this grading, it may be mentioned, doing away with holes, and making the roadway as even as it is possible to get it before the oil is placed upon it. The ground to be treated is then saturated with water, and afterwards comes the oil which is heated in a car, so as to make its running easy. The heated oil is then applied to the roadway by means of a sprinkling cart, in much the same way as the English authorities sprinkle water on our streets (generally just before rain). The oil is allowed to flow freely upon the surface of the road, and after the first application, a second takes place, the operation being carried out as in the first instance. The roadway is again harrowed, and by this time the earth becomes thoroughly mixed with the oil, presenting a very sticky appearance. The steam roller next comes along, and completes the work, the result being the making of what is described in America as a perfect and dustless roadway.

The question of cost is, of course, one which will immediately appeal to the various administrative bodies in this country, for apart from one or two cases of wilful waste, it must be admitted that we are particularly fortunate in having guardians of the public purse who take care not to unduly spend the ratepayers' money. The system of oiling roads, as suggested above, however, has the special advantage of being economical, and though in England the cost would be somewhat greater than it is in America, it is safe to say, this new treatment of roads would be found to be quite as cheaply adopted as the continuance of the present old-fashioned and entirely unsatisfactory methods. The oil used may be either the heavy crude, such as is in abundance in the Californian and other American fields, or the residue of distillation of lighter crudes, and even upon the English market it could be placed at comparatively cheap prices.

With the advent of the spring season when the minds of the members of our highway authorities are turning to the ever-important question of road repair, we do trust that they will make a determined attempt to grapple with the problem of the dust, and having made up their minds to rid the members of the community from the present serious grievance, they will follow the worthy example of their American cousins and carry out a system of treating their roads, which is both economical and highly satisfactory.

◆

PRODUCTION OF ENGLISH COMPANIES IN RUSSIA.

Baku Russian Petroleum Co., Ltd.—The production for the week ended 2nd February was 243,000 poods, or 3,917 tons; and for the week ended 9th February was 225,000 poods, or 3,627 tons.

Russian Petroleum and Liquid Fuel Co., Ltd.—The production for the week ended February 3rd was 181,000 poods, or 2,918 tons; and for the week ended 10th February, 187,000 poods, or 3,015 tons.

Spies Petroleum Co., Ltd.—The output for the week ended 3rd February was 121,620 poods, or 1,961 tons; and for the week ended 10th February, 109,560 poods, or 1,768 tons.

The European Petroleum Co., Ltd.—The production for the week ended 3rd February was 133,705 poods, or 2,156 tons; and for the week ended 10th February was 136,743 poods, or 2,204 tons.

Last Year's Importation of Illuminating Oils to the United Kingdom.

HOW THEY WERE DISTRIBUTED.

In order that our readers may the more clearly see through whose hands the various bulk shipments of illuminating oil to the United Kingdom during 1906 passed, we have compiled the following detailed list of shipments, shewing how far the respective distributing firms upon the English market were concerned in the country's total illuminating oil imports. We would mention that the totals as here shewn will be found to differ from those given in our last issue, but the reason is that a few small parcels of illuminating oil have been omitted from this list, their importance not warranting inclusion. On the other hand, the corrected statement sent to us by the Principal of the Statistical Office of the Customs House has been included in the imports of the Anglo-American Oil Co., the consequence of which is that about 5,500,000 gallons have now been added to the details which went to make up the figures we gave upon page 70 of the last issue of the Review.

During the twelve months, the bulk shipments of the various distributing companies in the United Kingdom have been as under:—

ANGLO-AMERICAN OIL COMPANY, LTD.

Date.	Vessel.	No. of Gallons.	Port Whence.
Jan. 5	Narragansett	2,805,120	New York.
,, 9	Potomac	828,350	Philadelphia
,, 31	Lackawanna	669,330	New York
Feb. 1	Suwanee	577,330	Philadelphia
,, 12	Potomac	492.590	,,
,, 10	Delaware	82,376	New York
,, 15	Potomac	738,890	Philadelphia
,, 14	Delaware	1,280,120	New York
Mar. 10	Snowflake	970,360	Philadelphia
,, 15	Prometheus	4,000	New York
,, 19	Terek	438,000	Philadelphia
,, 17	,,	438,000	,,
,, 21	Prometheus	998,390	New York
,, 27	Suwanee	130,780	,,
,, 24	Narragansett	2,798,600	,,
,, 24	Delaware	1,281,600	Philadelphia
,, 22	Washington	671,800	,,
,, 22	Potomac	615,600	New York
,, 23	,,	614,600	,,
April 6	Deutschland	1,311,320	,,
,, 19	Chesapeake	1,244 000	Philadelphia
,, 19	———	2,201,250	New York
,, 23	August Korff	619,870	,,
,, 25	,,	88,470	,,
,, 26	Narragansett	3,123,320	,,
,, 27	Snowflake	951,530	Philadelphia
,, 27	Potomac	1,285,440	,,
May 3	Delaware	1,302,900	New York
,, 24	Chesapeake	965,550	Philadelphia
,, 28	Lucigen	1,007,500	,,
,, 31	Balakani	2,932,820	New York
June 1	Genesee	567,420	Philadelphia
May 30	Lucigen	1,043,550	,,
,, 30	Potomac	1,295,760	,,
June 8	Cymbeline	282,020	,,
,, 9	Delaware	1,298,750	New York
,, 22	Suwanee	432,325	Kustendje
,, 30	Chesapeake	666,240	New York
July 6	Narragansett	2,940,360	,,
,, 12	Suram	1,104,670	,,
,, 12	Potomac	929,200	Philadelphia
,, 13	Delaware	1,299,560	Hamburg
Aug. 4	Chesapeake	563,130	Philadelphia
,, 7	Suwanee	592,500	Kustendje
,, 17	Narragansett	2,751,580	New York
,, 18	Delaware	611,000	Philadelphia
,, 23	Lackawanna	664,290	,,
,, 23	Bayonne	500,050	,,
,, 24	Delaware	400,000	,,
,, 22	Bayonne	500,050	New York
Sept. 7	Weehawken	295,000	Philadelphia
,, 8	Lucerna	1,203,423	,,
,, 10	Weehawken	720,000	,,
,, 19	Narragansett	2,769,080	New York
,, 19	Cymbeline	1,693,770	Philadelphia
,, 27	Delaware	440,000	New York
Oct. 1	Bayonne	238,620	,,
,, 1	,,	123,800	,,
,, 10	,,	597,960	,,
,, 10	Delaware	853,560	Philadelphia
,, 9	Hermoine	1,699,800	New York
,, 16	Suwanee	133,990	Kustendje
Sept. 28	?	30,920	New York
Oct. 23	?	2,708,410	,,
Nov. 8	Delaware	880,350	,,
,, 6	Potomac	430,500	,,
,, 7	Weehawken	582,940	Philadelphia
,, 13	Potomac	812,150	New York
,, 23	Suwanee	467,200	Kustendje
,, 20	Bayonne	1,014,340	New York
,, 29	Narragansett	2,986,700	,,
,, 27	August Korff	822,880	Philadelphia
Dec. 5	Vedra	1,081,070	New York
,, 24	Delaware	632,800	,,
,, 24	Potomac	674,420	,,
,, 18	,,	480,320	,,
,, 27	Ottawa	750,920	Philadelphia
,, 28	Delaware	632,800	New York
	Total	77,970,974	

CONSOLIDATED PETROLEUM COMPANY.

Date.	Vessel.	No. of Gallons.	Port Whence.
Jan. 4	Caucasian	1,258,800	Batoum
,, 4	,,	544,000	,,
,, 9	Kura	598,400	Hamburg
Feb. 2	Terek	734,400	Batoum
,, 6	Rion	271,000	Novorossisk
,, 2	Kura	414,480	Trieste
,, 22	Aras	509,000	Batoum
,, 21	Rion	543,030	Novorossisk
,, 22	Balakhani	850,000	Port Arthur
April 2	Suram	924,000	Batoum
,, 7	Rion	818,160	Port Arthur
May 3	Terek	1,387,200	Batoum
,, 7	Rion	308,000	,,
,, 30	,,	515,850	,,
June 9	,,	417,480	Hamburg
,, 9	,,	417,480	,,
,, 11	Aras	1,278,400	Batoum
,, 21	,,	1,324,680	,,
,, 21	Rion	813,690	,,
Aug. 24	Suram	924,800	,,
,, 22	Rion	815,100	Hamburg
,, 22	?	480,000	Batoum
,, 30	Terek	924.800	,,
,, 30	,,	489,600	Constantza
Sept. 1	Aras	1,316,000	Hamburg
Oct. 21	Kura	882,000	Kustendje
,, 23	Aras	825,000	New York
Nov. 2	,,	1,269,000	Hamburg
Oct 30	Rion	825.000	Sulina
Nov. 3	Aras	442,820	New York
,, 20	Suram	1,251,000	,,
,, 29	Georgian Prince	1,168,020	Hamburg
,, 13	Kura	846,000	New York
Dec. 20	Lucigen	1,593,400	Batoum
,, 22	Aras	1,237,000	New York
	Total	28,917,590	

HOMELIGHT OIL COMPANY.

Date.	Vessel.	No. of Gallons.	Port Whence.
Jan. 6	Aureole	645,790	Batoum
,, 19	Margaretha	745,280	,,
Feb. 2	Terek	707,200	,,
,, 7	Suram	435,200	,,
April 7	Cymbeline	810,000	,,
,, 5	,,	837,000	,,
,, 17	Aras	1,300.000	,,
May 19	Suram	1,298,080	,,
June 25	Aureole	675,000	,,
,, 27	,,	708,910	,,
July 4	Lucigen	1,620,000	,,
Aug. 16	Aureole	1,452,600	,,
Oct. 12	Mira	785,570	,,
,, 12	,,	624,550	,,
,, 23	Beacon Light	1,033,600	,,
Dec. 23	Mira	1,404,000	,,
	Total	15,082,780	

GENERAL PETROLEUM COMPANY.

Date.	Vessel.	No. of Gallons.	Port Whence.
Jan. 4	Silverlip	614,250	Port Arthur
,, 4	,,	341,250	,,
,, 13	Bulysses	1,360,000	Kustendje
Feb. 13	Pinna	717,200	Fiume
,, 13	,,	176,800	Philadelphia
,, 15	,,	221,200	,,
Mar. 1	,,	490,000	,,
April 10	Euplectela	280,000	,,
,, 19	?	775,200	Port Arthur
May 4	?	476,000	,,
,, 24	Pinna	1,006,400	,,
,, 26	,,	1,078,480	,,
June 18	Bulysses	770,850	Constantza
July 3	Euplectela	224,000	Philadelphia
,, 10	,,	353,600	,,
Aug. 17	Pinna	364,480	Constantza
,, 24	,,	440,000	Kustendje
Oct. 20	,,	756,000	Port Arthur
,, 27	Euplectela	888,000	Philadelphia
,, 31	Pinna	476,000	Port Arthur
Nov. 6	Euplectela	494,200	Philadelphia
,, 20	Petrolea	70,000	Hamburg
	Total	12,373,910	

THE BOWRING PETROLEUM COMPANY.

Date.	Vessel.	No. of Gallons.	Port Whence.
July 4	Terek	1,360,000	Port Arthur
,, 20	Beacon Light	1,039,290	,,
Aug. 24	Lucifer	1,418,310	Philadel.
Oct. 11	,,	1,419,550	,,
	Total	5,237,150	

WESTERN PETROLEUM COMPANY.

Date.	Vessel.	No. of Gallons.	Port Whence.
Feb. 3	Kura	453,750	Trieste
,, 7	Suram	408,000	Batoum
,, 7	,,	408,000	,,
Mar. 2	Kura	6,330	Trieste
,, 2	Suram	5,170	Batoum
May 2	Aras	770,000	Hamburg
July 10	,,	61,050	,,
Sept. 29	Surana	1,242,000	Trieste
	Total	3,354,300	

OTHER FIRMS.

Date.	Name.	Vessel.	No. of Gallons.	Port Whence.
Jan. 11	Barringer	Snowflake	970,641	Philadel.
Mar. 23	,,	Prometheus	1,186,220	New York
Apl. 26	,,	Aras	476,000	Hamburg
July 3	Diamond Lub. Co.	Euplectela	784,000	Philadel.
Aug. 1	Wheatley	Cymbeline	829,600	Batoum Novorossisk
Sept. 24	Meade-King, Robinson & Co.	Vedra	543,000	Batoum
,, 27	,,	,,	420,000	,,
Dec. 4	L'dn. Oil Storage	Prudentia	300,000	Port Arthur
,, 10	Meade-King, Robinson & Co.	,,	607,750	,,
,, 27	Barringer	Turbo	336,000	Hamburg
	Total		6,453,211	

LONDON OIL SHARE MARKET.

FRIDAY, FEBRUARY 15TH.

Dealing has been more active during the past fortnight in Oil Shares on the London Stock markets than for some little time past, and though the entire list has not maintained improvements, the tone is decidedly better.

To quote prices current on February 2nd—Anglo-Russians stood 0-1/8, Assam Oil 5/8-3/4, Baku Ordinary 3s. to 4s., Preference 5s. 6d. to 6s. 6d., Bibi-Eybats, 3/8-1/2, Debentures 84-89, Californian Oilfields 5 1/4-5 3/4, Refineries 1 3/16-1 5/16, European Preference 1/16-3/16, Debentures 82-86, Russian Ordinary 8s. 6d. to 9s. 6d., Preference 10s. to 11s., Schibaieff Ordinary 5s. 6d. to 6s. 6d., Preference 2 1/4-2 3/4, Shell Transport Ordinary 31s. to 32s., Preference 9 1/2-10, and Spies 9/16-5/8.

Since then a good deal of business has been transacted in Californian Refineries and Shell Transport Ordinary. The former first improving to 1 3/8-1 5/8 and later to 1 5/8-1 7/8, at which figure they remain firm; while the latter rose rapidly to 36s. to 37s., and afterwards reached 37s. to 38s., remaining a steady market as we write.

Californian Oilfields have also improved to 5 1/2-6, and Russian Ordinary to 9s. to 10s. Spies altered to 17/32-19/32, while Baku Ordinary reacted to 2s. 6d. to 3s. 6d. and the Preference 5s. to 6s.

At the Mid-February account, which commenced on Tuesday, making up prices shew an almost unbroken, list of declines from those of the End-January settlement. Baku Ordinary fell 6d. at 3s., Preference 6d. at 5s. 3d., Californian Oilfields 1/16 at 5 9/16, Russian Ordinary 1s. at 9s., Schibaieff Ordinary 9d. at 6s., Spies 6d. at 9/16, Anglo-Russians at 1s., Russian Preference at 10s. 6d. Schibaieff Preference at 2 1/2 shew no change, while the only advance is the rise in Shell Transport Ordinary, which improved 1/32 at 1 7/8.

Contango Rates ruled rather high, 7 per cent. to 8 per cent., and even 8 per cent to 10 per cent. being exacted.

Latest prices are given on page 100.

◆

A New Tank Steamer.—The Sun Oil Co. recently launched what is stated to be the largest tank ship ever built at Newport News. She is over 405 ft. long and is to be employed in the Pacific Coast oil trade.

CLASSIFIED IMPORTS INTO UNITED KINGDOM UP TO FEBRUARY 11th, 1907.

IN GALLONS.

[ALL RIGHTS RESERVED.]

Country.	Illuminating.		Lubricating.		Residuals.		Gas Oil. (Solar)		Benzine.		Fuel Oil.		Other Descriptions.		Totals.	
	Since Jan. 28.	From Jan. 1.	Since Jan. 28.	From Jan. 1.	Since Jan. 28.	From Jan 1.	Since Jan. 28.	From Jan 1.	Since Jan. 28.	From Jan. 1.	Since Jan. 28.	From Jan. 1.	Since Jan. 28.	From Jan. 1.	Since Jan. 28.	From Jan. 1.
Austria ...	—	—	8,000	21,640	14,000	24,000	—	—	—	—	—	—	—	—	22,000	45,640
Belgium ...	—	153,410	24,600	57,810	—	—	—	—	—	—	—	—	—	590	24,600	211,810
Canada ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dutch India.	—	—	—	—	—	—	—	—	—	2,088,580	—	—	—	—	—	2,088,580
Germany ...	58,920	987,810	82,750	227,400	2,000	2,000	—	—	—	—	—	—	800	1,400	144,470	1,218,610
Holland ...	—	—	1,280	1,280	—	—	—	—	2,000	84,630	—	—	7,080	20,920	10,360	106,830
Roumania ...	—	1,102,830	—	—	—	—	—	1,065,900	—	591,450	—	126,700	—	—	—	2,886,880
Russia ...	1,394,600	4,237,880	24,160	806,860	—	—	—	—	—	—	—	—	—	—	1,418,760	5,044,740
U.S.A. ...	1,804,310	9,564,490	961,170	4,542,420	5,860	5,860	2,454,280	6,389,080	—	510	—	—	42,040	345,580	5,267,660	20,847,940
Other Countries	—	—	370	1,290	—	—	—	—	—	2,500	40	40	—	240	410	4,070
	3,257,830	16,046,420	1,102,330	5,658,700	21 860	31,860	2,454,280	7,454,980	2,000	2,767,670	40	126,740	49,920	368,730	6,888,260	32,455,100

RUSSIAN .. AND ROUMANIAN .. NOTES.

The Regatul Roman Co. has started two new boreholes at Moreni.

Bound for England.—Two tank steamers have been chartered to carry kerosene from Batoum to England at 11s. 6d. per ton to the nearest ports and 12s. for other ports.

A Roumanian Boom.—Greater interest is now manifested regarding petroliferous lands in the Dambovitza district, and purchases of land there are becoming more numerous. Mr. Campeanu has started a borehole at Glodeni.

Moreni Production.—The production of crude oil at Moreni in December amounted to 20,225 tons, of which the Regatul Roman Co. produced 13,818 tons, the Romano-American 3,852 tons, Pleyte and Co. (formerly Moreni Syndicate) 2,555 tons.

New Nijni-Novgorod Company.—A company has been formed at Nijni-Novgorod to take over the petroleum carrying and trading business of Mr. D. V. Sirotkin. The capital is 1,500,000 roubles. The management will remain in the hands of Mr. Sirotkin.

The Alpha Co. has renounced its rights to the concession at Vulcana-Pucíosa, in the Dambovitza district, acquired by it from Mr. V. Toroceanu. The well drilled by it to 520 metres achieved no results, and there was no indication to justify any further drilling operations.

Developments at Binagadi.—The Mines Department of the Caucasus has granted permission to Mr. E. Levine and Mr. E. Antik to commence to produce petroleum on portions of plots Nos. 95 and 242 at Binagadi, near Baku, of an aggregate area of 3·3 acres leased from private owners.

Roumanian Exports.—The total exports of petroleum products in December amounted to 25,207 tons, which included 12,580 tons illuminating oil, 7,244 tons benzine, and 5,382 tons of crude oil, gas oil, distillate, etc. The largest quantities were exported to the following countries:—England, 10,622 tons; France, 4,233 tons; India, 5,465 tons; Italy, 2,027 tons; and Germany, 1,189 tons.

That Pipe Line Again.—The Batoum exporters are again experiencing great difficulty in obtaining their supplies of kerosene from Baku, which come after delays of 10 to 12 days or more. The railway has announced that it does not accept liability for prompt delivery of oil by pipe line, which points to the unsatisfactory and irregular working of the latter. Deliveries of oils by direct tank waggon from Baku proceed regularly.

A Well-Founded Complaint.—The leading petroleum distributors in Russia—including Nobel, Mazout Co., Mantascheff, the Neft Co., and others—have jointly protested to the Minister of Industry and Commerce against the action of the south-western railways in refusing at certain times to accept oils for transport from Czaritzin station, and also delaying the return of empty tank waggons. The result is that at the height of the season the consumers in certain districts are left without illuminating oil or fuel, and the distributing firms are prevented carrying out their contracts.

New Opening for Liquid Fuel.—The industrial establishments in the Braila and Galatz districts propose to adopt liquid fuel. These include cement works, iron foundries, flour mills, etc., and also communal establishments. The total quantity of residuals which will be required to satisfy the demand from this new quarter is estimated at 30,000 tons per annum. This increase in demand, added to the tendency of the leading refineries to extend the manufacture of lubricating oils out of residuals and the prospective export of residuals to Italy under the reduced import duty, should ensure good prices for residuals in Roumania for the future.

Another Good Well at Moreni.—Well No. 4 of Messrs. Pleyte and Co. at Moreni has become productive, yielding from 50 to 80 tons of crude oil per day.

Increase of Capital.—The Russian Ministry of Trade and Industry has sanctioned the proposed increase in the capital of the Moscow-Volga Petroleum Co. from 1,200,000 to 2,400,000 roubles.

In Dambovitza.—The production of crude oil at the different fields in the Dambovitza district in December was as follows:—Gura-Ocnitza, 1,904 tons; Colibasi, 410 tons; Glodeni, 240 tons; and Resca, 23 tons; total, 2,577 tons.

Severe Weather Impedes Progress.—The severe weather which during the last few weeks has prevailed in Roumania has hindered work at the oil fields, and the consequences of this will probably shew in the figures of the January production.

Russian Far Eastern Shipments.—On January 30th a cargo of 393,000 poods of Russian kerosene were shipped in bulk from Batoum to the Far East. This is the first bulk oil cargo shipped from Batoum to the Far East since the crisis in the Russian industry began.

Prospecting at Grosny.—The Terek Provincial Administration has permitted the Caspian and Black Sea Society to commence exploitation of a prospecting plot of an area of 27 acres, taken over from Mr. L. von Rechter, and situated in the Ermolovsky part of the Grosny oil fields.

Dr. Moeller, who has resigned his post as chief secretary to the petroleum enterprises of the Disconto-Bleichroeder group, has been appointed chief of the technical bureau of the Steaua Romana. Dr. Moeller has had considerable experience in Roumanian petroleum matters, and his services should prove of great value to his new employers.

The Sunik Petroleum Co., operating at Baku, where they have their own freehold properties, during their fourth financial year, 1905, have incurred a loss of 92,538 roubles, which, added to the loss of the previous years, makes a loss of 211,461 roubles. The capital of the company is 2,100,000 roubles. In the balance sheet made up to January 1st, 1906, the properties are valued at 2,497,483 roubles.

Liquid Fuel for the Bulgarian Government.—The Bulgarian Government is said to be seriously contemplating the adoption of liquid fuel for their flotilla of river and sea-going steamers, and also for certain Government establishments now burning imported coal. The Steaua Romana and other leading Roumanian refining companies have made offers to the Bulgarian Government to supply residuals.

Activity in Roumania.—Activity in drilling and in preparations for drilling is very great just now at the Roumanian oil fields. The leading companies alone, such as the Steaua Romana, Regatul Roman, Sylva, Pleyte and Co., and International Co., propose starting between 150 and 200 new wells. Huge quantities of materials are being ordered, more especially from German engineering works, and certain firms are so full up with work from Roumania that they can accept no other orders now.

Batoum Trade.—According to reports from Batoum, the tone of the market is very undecided, and is subject to frequent changes. People there are at a loss to understand the cause of the sudden falling off in shipments to England, which affects the bulk oil trade as a whole. The arrivals of oils from Baku are also in limited quantities. Case oil shipments were also small, but for quite different causes: the gale and snowstorm which raged hindered the loading of cases on board ships. The case factories are working regularly. In the latest charters the freight for cases was put at 5d. per case to Bombay, and 6d. to Calcutta.

AMAZING PROGRESS OF THE MOTOR INDUSTRY IN ENGLAND.

A writer in the *Daily Express* points out that more than £8,500,000 was subscribed by the English public for motor-car and associated ventures last year.

The outlook for British makers has never been brighter, an *Express* representative was informed yesterday by a number of leading manufacturers.

British motor-cars to the value of £3,500,000 were sold during the twelve months. Continental competition has at last been met successfully, and the British cars are now more than holding their own.

Some interesting figures have been compiled, shewing the present position in this country. There are now:—

250,000 men engaged in motor occupations.

120,000 motor-cars on British roads.

818 motor-omnibuses in London.

157 motor makers in the London Post Office Directory.

More than 5,000 omnibus horses disappeared from the London streets last year.

There has been a decrease of nearly 500 in the number of horse omnibuses licensed, and an increase of 565 motor-omnibuses.

Among the trades directly or indirectly benefiting by the motor boom are:—

Coachbuilders.
Lampmakers.
Brassfounders.
Indiarubber importers.
Nut and bolt makers.
Leather dealers.

There are now 20 newspapers, weekly and monthly, in London devoted to motor topics, and £20,000 a week is paid in wages by firms catering for the journalistic and literary needs of motorists.

In the County of London there are 21,000 registered cars; £25,000 has been paid in registration fees; £5,500 was spent on driving licenses last year.

The amount paid in wages to the 100,000 chauffeurs and the 150,000 men employed in making cars and supplying accessories is estimated at over £15,000,000 for the year.

Owing to the tremendous demand for British cars nearly £500,000 clear profit was made last year by sixteen British firms, and the orders already in hand promise an even more profitable year's trade to come.

THE BATOUM EXPORT TRADE DURING DECEMBER.

OFFICIAL FIGURES.

Another decline has to be recorded in the shipments of kerosene from Batoum during December, the decrease in exports (made up entirely of kerosene) being about 500,000 poods. What is perhaps more significant than these constantly declining figures is the absence of the usual arrangements for the present year's contracts, a fact which suggests that for the next few months, at all events, Batoum exports will shew no very pronounced increases.

The following are the official figures of the arrivals of the various oils at Batoum and the shipments during the closing month of the year, together with the stocks upon the first day of the Russian New Year:—

	Arrivals. in Dec. (in poods)	Shipments. in Dec. (in poods)	Stocks on 1st Jan. (in poods)
Refined kerosene	2,249,000	2,206,000	3,855,000
Kerosene distillate	—	—	24,000
Solar oil	70,000	27,000	467,000
Machine oil	930,000	540,000	926,000
Spindle oil	143,000	150,000	99,000
Cylinder oil	22,000	15,000	26,000
Vaseline oil	—	80,000	109,000
Lubricating oil distillate	31,000	—	99,000
Residuals	127,000	89,000	257,000
Total	3,572,000	3,062,000	5,862,000

During December there was an increase in the deliveries of machine oil from Baku and a consequent increase in the stock of this product. There is still no demand for distillate or solar oil, and the stocks of the same remain unchanged.

The exports were distributed among the various consuming countries as under:—To England, 1,087,000 poods, which is a slight improvement against the preceding months; to France there was exported 318,000 poods; to Germany, 161,000 poods; and to Belgium 176,000 poods. There has lately been a great falling off in the export of Russian kerosene to Belgium and Holland, which countries formerly imported considerable quantities of it. To Egypt there were shipped 400,000 poods, chiefly bulk oil, and a very small quantity of case oil. About 475,000 poods of kerosene in cases was exported to Turkish and Balkan ports, and 455,000 poods were shipped to Russian ports.

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Telephone Nos.:—249 & 254 LIVERPOOL. 1990 MANCHESTER.

MEADE-KING, ROBINSON & Co.,
11, Old Hall Street, LIVERPOOL, & 18, Exchange Street, MANCHESTER,
IMPORTERS AND DISTRIBUTORS OF
PETROLEUM PRODUCTS THROUGHOUT NORTHERN AND MIDLAND DISTRICTS OF ENGLAND.

SPECIALITIES: All Grades of
GAS OILS, MINERAL LUBRICATING OILS, PARAFFIN SCALE AND WAX, PETROLEUM SPIRIT,
BENZOLINE AND BENZINE, SWANSDOWN WATER WHITE AMERICAN PETROLEUM

THE SCHIBAIEFF PETROLEUM COMPANY.

We have received the figures shewing the results of the operations of the Russian firm of the Schibaieff Petroleum Co., Ltd.—Messrs S. M. Schibaieff and Co., of Moscow—for the financial year, comprising the period from 1st November, 1904, to 1st April, 1906.

The operations during that period resulted in a loss of 216,053 roubles on a total expenditure of 1,235,215 roubles, the largest part of which is made up of discounts of bills, interest on documents, interest on use of deposits, interest to foreign correspondents, and rebates to customers, amounting in all to 803,150 roubles. In the preceding financial year, 1903—1904, on a total revenue of 1,448,577 roubles, there was earned a profit of 451,311 roubles of which a dividend of 6½ per cent. was declared.

The nominal capital of the company is 6,500,000 roubles made up of the following issues:—1885, 1,500,000 roubles; 1897 and 1899, 1,000,000 roubles each; 1901, 3,000,000 roubles; and 4½ per cent. debenture issue in 1902, 300,000 roubles.

The following is the valuation of the property in the balance sheet:—Refineries with the new buildings, 4,207,804 roubles; oil fields and equipment, 7,041,048 roubles; fleet and inventory, 1,046,323; storage reservoirs, pipe lines, tank waggons, etc., 1,407,273 roubles; other property, 863,334 roubles; stock of oils, 3,797,939 roubles; debts receivable, 3,351,948 roubles; debts payable, 9,696,523; depreciation fund, 3,719,906 roubles; reserve fund, 1,189,147 roubles.

THE DISCOVERY OF HELIUM IN AMERICAN NATURAL GAS.

About a year ago, points out the *Well Drillers' News*, Prof. H. P. Cady discovered the presence of helium in large quantities in Kansas natural gas. Assisted by Prof. D. F. McFarland he began a series of experiments which resulted in the discovery of a process by which the helium could be separated from the gas at an insignificant cost. Since then both gentlemen have experimented with gas from Indian Territory, Missouri, Indiana, Ohio, and West Virginia, and have found helium in all of them, although the Kansas product contained it in the largest quantities. Of the Kansas gas, that found nearest the Missouri line contains the least helium percentage. The percentage increases as one goes westward, until the maximum is reached at Dexter, Kan. The dexter gas contains 1·85 per cent. of helium. That found at Eureka contain 17.5 per cent. of helium. The gas furnished by the Kansas Natural Gas Co. to Kansas City consumers contains 1·5 per cent.

The apparatus which Prof. Cady and Prof. McFarland have devised for separating the helium is somewhat complicated, but the principles of the process of separation are simple enough. The natural gas is placed in a glass tube and surrounded by liquid air, which quickly reduces most of the aggregate to a liquid form. Helium and a few other gases will not liquify, however, at the temperature of liquid air, and these are drawn off into a series of cocoanut charcoal, a highly absorbent substance. Of all the gases which escape liquefaction, helium is the only one which the charcoal will not hold for any length of time, and with a mercury pump it is drawn from the charcoal tubes in a comparatively pure state.

Before the discovery made by Professor Cady the only known source from which helium could be obtained was uranium ores, from which radium is also obtained, and which are exceedingly rare and expensive. The existence of the element in the universe was first discovered by Professor Janssen during a solar eclipse in 1868. The unknown element was named helium. Terrestrial helium was discovered by Prof. Ramsay in 1895. Next to hydrogen, helium is the lightest known gas. To the naked eye it is absolutely invisible. Viewed through the spectroscope, its most prominent line is a brilliant yellow, tinged with apricot colour, accompanied by one red line, two in the green and two in the blue. It has been discovered of radium that in spending its energy it gives off an exhallation which in turn becomes helium. This has led Prof. Cady to believe that the presence of helium in natural gas is due to the presence of minute particles of radium in the earth which in its activities gives off the gas which finally becomes helium and that this has accumulated in vast quantities in the natural gas reservoirs. Since the discovery of Prof. Cady has become known, the University of Kansas has had numerous requests from all parts of the world for small quantities of the precious element. Among these was a request from a wireless telegraph company in Germany, from which it is supposed that a practical use has at last been found to which helium may be put. As far as Prof. Cady and Prof. McFarland have been able to discover, the substance has no practical value, beyond its scientific interest and the quantity that the University of Kansas has or could secure within a few days would supply the demand of the whole world for some time to come.

PETROLEUM IMPORTS INTO GERMANY DURING DECEMBER.

The following are the official statistical figures of the imports of petroleum products into Germany in December, compared to November (in tons):—

	December.	November.
Refined illuminating oil	126,176	107,026
Lubricating oil	23,147	16,298
Crude benzine	8,393	9,060
Refined benzine	720	1,217
Crude oil	2,628	699
Residuals	43	23
Gas oil	792	381
Artificial turpentine and other mixtures	115	109
	162,014	134,813

The imports from the different producing countries in December, compared to November, were:—

	December.	November.
U.S.A.	119,835	98,043
Russia	19,642	12,992
Austria-Hungary	10,926	10,973
Dutch India	6,027	7,860
Roumania	3,365	2,864
Other countries or origin unknown	2,219	2,071
	162,014	134,813

THE PETROLEUM TRADE OF MOSCOW DURING 1906.

In the petroleum trade of Moscow the year 1905 left a very bad legacy to its successor, 1906. The railway strikes in the Moscow district in December resulted in the complete exhaustion of the stocks of residuals, whilst the deliveries of coal ceased altogether. Those manufacturers who, owing to the exorbitant price of fuel oil went over to coal, had to change back to oil, buying the latter in Moscow during January at 60 copecs per pood. Large deals for prompt delivery were made on the basis of 50 copecs delivered at Nijni, 51-52 copecs Kineshma, and 52-53 copecs Jaroslav. In February several large contracts were concluded for the season 1906--07 on the bases of 42-43 copecs Nijni, 43-43½ copecs Kineshma, and 42-43½ copecs Jaroslav. At the same time prompt sales were made at 60 copecs at Moscow.

During the navigation of 1906 the oil freights on the Volga were 5¾ copecs from Astrakhan to Nijni, or 1¾ copecs higher than in 1905. In March sellers came forward with offers of residuals for 1906-07 season at 53-54 copecs, delivery in Moscow, or 50-51 copecs ex tank Moscow, but buyers generally declined to contract for a whole year, and limited themselves to half-year, *i.e.*, up to October or November, 1906. In April contracts continued to be concluded, but only for three, four or six months. In May prices began to decline somewhat, under the influence of the reassuring news which came from Baku of a growing production. In June there were sales at 50-52 copecs with delivery. At these prices buyers ordered only very limited quantities, as it was expected that prices would continue to decline. Shortly after, however, the news came from Baku of the outbreak of strikes, and sellers suspended operations, and in July the price went up to 54-55 copecs in bulk, and in August spot residuals were sold at 57-58 and even 59-60 copecs with delivery. Manufacturers and house-owners, alarmed by these prices, began to hurriedly go over to coal, wood and peat fuel. In September contracts were concluded for deliveries up to May, 1907, at 60-61 copecs in bulk, and 63-65 copecs with delivery. In October, November, and December there were spot sales only, 63-62-60 copecs with delivery.

The prices of kerosene during 1906 were as follows: January and February, 138 copecs per pood; March, 130 copecs; April, 127 copecs; May, June and July, 118-120 copecs; August, 118, 120, 124 and 125 copecs; September and October, 124-125 copecs; November, 120, 121, 119 and 120 copecs; December, 120, 121, 115 120, 118, 120 and 150 copecs per pood in bulk. With delivery in barrels the price was about 30 copecs per pood higher.

The sales of lubricating oils were normal. The prices up to 15th April were:—Machine oil, 150-160 copecs per pood; spindle oil, 145-155 copecs; cylinder oil No. 1, 3 roubles, No. 2, 3·50 roubles; viscosine, 4·50 roubles; from the 15th April, when the 60 copecs duty came in force, the prices were advanced for machine and spindle oil by 60 copecs, and for cylinder oil by 50 copecs per pood.

The price of astraline fluctuated throughout the year between 1·80 and 2 roubles per pood in barrels. Benzine, notwithstanding the imposition of the duty, varied in price between 2 and 5 roubles per pood according to specific gravity.

The sales of crude increased greatly against 1905 thanks to adoption of Diesel engines. The price throughout the year was the same as for residuals.

A new product appeared on the Moscow market in 1906, and that was paraffin wax manufactured by Nobel Bros. from Tcheleken crude oil. The price was fixed at from 8·25 to 8·40 roubles per pood. The small quantity delivered to Moscow, however, was sold very quickly.

◆

MESSRS. HENRY FUNCK AND COMPANY'S IMPORT CIRCULAR.

Messrs. Henry Funck and Co., of 101, Leadenhall Street, London, E.C., have just issued their annual circular of data referring to the shipments of refined oil to the United Kingdom for the year 1906, from America (excluding Texas), Russia, Roumania, and Galicia. The details, which it should be mentioned are exclusive of the shipment of oil in barrels by general cargo steamers, are as follows:—

Ports.	American. Barrels.	Russian. Barrels.	Roumanian. Barrels.	Galician. Barrels.
Barrow	60,742	—	14,500	—
Belfast	119,598	32,588	—	10,000
Bristol	270,503	10,000	—	83,720
Cardiff	—	82,295	—	—
Dublin	138,668	—	—	—
Hull	185,848	101,256	20,000	—
Limerick ..	20,600	14,250	—	—
Liverpool ..	188,093	13,100	—	—
London	1,001,441	259,500	74,800	120,800
Manchester ..	257,933	210,190	10,500	—
Plymouth ..	79,760	—	—	—
Shields	77,950	15,250	—	19,900
Southampton ..	28,900	—	—	19,100
Sunderland ..	63,600	—	—	—
	2,493,636	738,430	119,800	253,520

The circular then goes on to give the various totals of imports from the different countries, going back to the year 1883, when America was credited with 1,329,004 barrels and Russia with only 502 barrels, or a total of 1,329,506 barrels. It was in 1900 when shipmennts from Russia first ran into over 1,000,000 barrels, reaching their largest total in 1903, when they were 2,202,120 barrels. It was also in the same year that the total shipments of refined oil to this country reached their record when altogether the figures stood at 4,316,747 barrels, the total for 1906 being 3,605,386 barrels.

GULF REFINING CO.,

Refiners of **Texas Petroleum.**

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SUPERIOR LUBRICATING OILS *OF HIGH VISCOSITY AND LOW COLD TEST.*

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The Petroleums of North America.

Being a Comprehensive Account of the Constituents of American Petroleum. . . . .

By Mr. CLIFFORD RICHARDSON.

(*Concluded from page 82.*)

The production of the Jennings field in 1904 was 2,905,507 barrels, while that of the Welsh field was over 35,892 barrels, and this has been largely increased since that date, amounting to 60,000 barrels per day at the beginning of 1905. The oil occurs in similar geological horizons as that of Texas, and the two fields may be considered as virtually one.

The petroleum has been examined by Charles E. Coates and Alfred Best, who present the following data :

	Texas.	Louisiana.		
	Beaumont.	Welsh.	Jennings.	Beaux Bridge.
Specific Gravity 25° ..	·9228	·9276	·9093	·9392
Distillation, Engler Flask, 760 mm. to 150°	None	None	None	None
150–200	2%	None	None	None
200–250	8	2%	13%	1%
250–300	26	17	28	15
300–350	26	23	24	22
Estimated depth of well (feet)	1,200	700 (?)	1,000	600
Per cent. of sulphur in crude oil	1·95	·032	0·39	0·20

It appears from the preceding data that the Louisiana oil carries much less sulphur than the Beaumont oil, and that the Jennings oil is of a lower density and gives a greater percentage of distillates below 300 degrees. Denser oil occurs outside of the Jennings field. In the latter, distillates have been isolated consisting of the C_nH_{2n-2} and C_nH_{2n-4} series of hydrocarbons corresponding to the following formula and having the following specific gravity and boiling point :—

Oil from Jennings Field. 60 mm. Pressure.

Fraction.	Symbol.	Sp. Gr.
110–115°	$C_{12}H_{22}$	·8479
160–165	$C_{14}H_{26}$	·8785
210–215	$C_{17}H_{30}$	·9009

The distillation of the lowest boiling point is characterised by an odour strongly resembling turpentine, so that it is sold as a turpentine substitute.

Messrs. Coates and Best have also examined the distillates from the Jennings and Welsh oils boiling below 300 degrees. In the Jennings oil three fractions were obtained, which, after treatment with H_2SO_4, have the following characteristics :—

Fraction.	Pressure.	Symbol.	Sp. Gr.	Ref. Ind.
Oil from Jennings Field.				
*110–115°	80 mm.	$C_{11}H_{20}$	·8373	1·4535
†150–155	80 mm.	$C_{13}H_{24}$	·8649	1·4692
200–205	80 mm.	$C_{16}H_{28}$	·8801	1·4805
Oil from Welsh Field.				
145–150	80 mm.	$C_{12}H_{22}$	·8551	1·4662
165–170	100 mm.	$C_{13}H_{24}$	·8679	1·4666
175–180	33 mm.	$C_{17}H_{32}$	·8736	1·4760

* Odour of turpentine. † No odour.

The second fraction from both of these oils agrees quite closely in their characteristics with that from the Summerland, Cal., oil of corresponding boiling point separated by Mabery :—

	Fraction.	Pressure.	Sp. Gr.	Ref. Ind.
Summerland, Cal..	150–155°	60 mm.	·8521	1·4681
Jennings, La. ..	150–155%	80 mm.	·8649	1·4692
Welsh, La... ..	165–170%	100 mm.	·8679	1·4666

All these fractions consist of hydrocarbons which have a composition corresponding to those of the C_nH_{2n-2} series, with the exception of the third, from Jennings oil, which is less rich in hydrogen and corresponds in composition to one belonging to the C_nH_{2n-4} series.

In another very heavy oil having the following characteristics, from Bayou Bouillion, similar distillates were examined by Coates :—

Specific gravity	·9669
Distillation begins	275°
Fraction at 300°	11·0%
Sulphur	·57%

Fraction.	Pressure.	Sp. Gr.	Ref. Ind.	Symbol.
140–145° ..	33 mm.	·8557	1·4691	$C_{13}H_{24}$
170–175 ..	33 mm.	·8871	1·4820	$C_{14}H_{28}$
190–195 ..	33 mm.	·8966	1·4883	$C_{17}H_{30}$
200–205 ..	33 mm.	·9006	1·4916	$C_{18}H_{32}$
225–230 ..	33 mm.	·9104	1·4972	$C_{19}H_{34}$

With the exception of the first fraction these distillates contain hydrocarbons belonging to the C_nH_{2n-4} series.

It is evident that the Louisiana petroleum, except in the smaller amount of sulphur which it contains, has a very considerable resemblance to Beaumont oil, and this is not surprising when the geographical and geological location of the two fields is considered.

Alaska Field.

Petroleum has been found in a number of localities in Alaska, the most important of which are known as the Controller's Bay, Cook Inlet, and Cold Bay fields, but nothing of industrial importance has been developed in any of them, although a number of wells have been sunk at various points.

A seepage from Cold Bay, Cook Inlet, in 1903, was found by the writer to have a density of ·989, 11·6 degrees B. It left on heating 72·3 per cent. of an asphaltic residue, having a penetration of 27, which contained 2·7 per cent. of paraffin scale solid at 40 degrees, and yielded 12 per cent. of fixed carbon on ignition. Such petroleum corresponds closely to some of those found in Texas. In the publication cited, data in regard to petroleums from the same field are given, which are of some interest :—

REPORT OF TESTS OF OIL FROM OIL BAY AND COLD BAY.

	Oil Bay.	Cold Bay.
Specific gravity at 16° ..	·9557 = 16·5° B.	·9547 = 16·6° B.
Distillation by Engler Method :—		
Initial boiling point ..	230°	225°
Burning oil (distillation up to 300° atmos. pressure..	13·2% = 25·9° B.	13·3% = 29·6° B.
Lubricating oils (spindle oils) 120 mm. pressure up 300°	39·2% = 22·6° B.	28·3% = 23·6° B.
Lubricating oils (120 mm. pressure, 300–350° ..	19·6% = 16·9° B.	18·3% = 18·0° B.
Paraffin oils by dessructive distillation under atmospheric pressure	22·4% = 20·4° B.	32·0% = 20·4° B.
Coke and loss	5·6	8·1
Total sulphur	·098	·116

These data fail to bring out the fact that the oils are largely of an asphaltic nature, but shew that the percentage of sulphur is not large. The initial boiling point is, in both oils, very high, and this, together with the high density, would point to the fact that they can never be of great industrial importance as far as the production of illuminants is concerned.

Petroleums from other localities in Alaska have not been examined as far as the writer is aware, but they are probably of the same character as that from the Cold Bay field.

The Cuban Field.

The native bitumens occur widely scattered over the Island of Cuba, but industrially only the solid forms have been developed, grahamite and asphalt. Incations of petroleum have been found in all the provinces with the exception of Puerto Principe, and various attempts have been made to sink wells, but so far without results. In the province of Santa Clara there is an occurrence of extremely light oil. At the Motembo well, a colourless naphtha occurs which it is difficult to believe is a natural product. Near the town of Santa Clara an amber-coloured petroleum of specific gravity ·901, 25·4 degrees B., is found floating upon the surface of a stream of water, having an agreeable odour like cedar wood. Most of the petroleums in Cuba, however, are extremely dense or in the form of maltha, having an asphaltic base, and a density of from ·95 to 1·05, 17·4 degrees to 10 degrees B. A number of samples of this material have been examined by the writer. The following are data characteristic of one of these malthas:—

Maltha from Hato Nuevo, Matanzas Province, Cuba.

Specific gravity, 25/25°	1·0466
Loss, 100°, to constant weight	6·2%
Consistency of residue	Soft.
Loss, 160°, 7 hours	6·8%
Penetration of residue at 25°	55
Loss, 200°, 7 hours (fresh sample)	11·9%
Penetration of residue at 25°	18
Bitumen soluble in CS_2, air temperature	98·6%
Organic matter insoluble	·7
Inorganic or mineral matter	·7
	100·0
Per cent. of total bitumen;—	
Soluble in 88° naphtha—air temperature	75·5%
Soluble in 62° naphtha	83·7
Fixed carbon	11·0%

A lighter oil is found in Santa Clara Province, having the following characteristics:—

Specific gravity 25/25°	·944
Beaume	18·3°
Loss 100°, for 1 hour	1·5%
Total loss 160°, 7 hours	18·5
Character of residue	Soft

None of the petroleums of Cuba can be of great industrial importance for the production of illuminants, and although it is not impossible that material may be obtained in large quantity after proper exploitation, it would prove, in all probability, to be asphaltic, and could only be made available for use as fuel.

Mexican Field.

Indications of the occurrence of petroleum are frequent along the coast line of the Gulf of Mexico, and especially in the neighbourhood of Tampico. A large number of samples of this material have been examined by the writer, and found to be of very great density and of an asphaltic nature, in this respect resembling the oil found in Cuba. The character of the petroleum in general is revealed by the following data:—

Petroleum from Well at Chapapote.

Specific gravity, 25/25°	·9604
Loss at 110°	10·4%
Loss at 160	23·4
Loss at 200	6·8
Penetration of residue at 150°	70
Penetration of residue at 200°	18
Bitumen soluble in CS_2 air temperature	99·8%
Organic matter insoluble	·1
Inorganic or mineral matter	·1
	100·0

While lighter oil may be developed on further exploitation, it is evident that the petroleum of Mexico can never be relied upon for the production of highly valuable products, although it may eventually be found in quantity for use as fuel.

Comparison of North American Petroleums.

From the preceding data it appears that the petroleums of North America are of a most varied and interesting character. Those of the earlier days of the industry, from the Appalachian field, were paraffin oils and on this account, and their freedom from sulphur, have been the most valuable obtained in the United States, or in any other part of the world, for the production of illuminants. Although the supply from this field forms a very much lower percentage in the total production of the United States than it has heretofore, and although the production has slightly diminished, the value of the latter is greater than that of any other field and it will probably occupy this position for many years to come, since it is becoming extended from year to year and new pools are being developed, as is illustrated by the great increase in the production of West Virginia and Kentucky within the last few years.

The petroleum of North-western Ohio and Canada which next appear upon the scene chronologically, being sulphur oils, were far less valuable, not only on this account, but because of the smaller percentage of illuminants, until a process of distillation with copper oxide was discovered which made it possible to secure a satisfactory article. The Ohio field of late years has extended into Indiana, and is of great importance, not only as regards the value of its products, owing to the possibility of making paraffin illuminants from it, but also on account of the number of barrels produced, in which, in 1904, it ranked third among the North American fields, with 21 per cent. of the total production.

Within the last ten years, the development of new fields has modified very largely the aspect of the petroleum industry in North America. California, which produced less than 5 per cent. of the entire supply of oil in 1899, in five years has more than quintupled that amount. This oil, however, is composed of such a series of hydrocarbons, of a non-paraffin nature, that its value is comparatively small, being nearly one-third less than that of the oil obtained from the Appalachian field. It does not offer a distillate which is satisfactory as an illuminant when burned by itself.

The oils from the more recently developed fields of Kansas and Texas are of variable character. Although all are more or less asphaltic, they also contain varying proportions of paraffin hydrocarbons, and the lighter oils are proving a vast source of supply of illuminants of a paraffin nature, which will, no doubt, continue to increase in importance in the future. The more asphaltic oils of the Gulf Coastal Plain of Texas and Louisiana, are so strongly asphaltic as to be of value only for the production of lubricants, for use as fuel and as gas oil. They yield practically no paraffin illuminants.

It is also worthy of note that no petroleums have been found in North America of the Russian type, that is to say, consisting preponderatingly of monocylic polymethylenes or napthenes.

The present aspect of the petroleum industry in the United States is a very satisfactory one. With the diminution of the output of paraffin oils in the Appalachian field, there has been an increase in that from the Indiana field, which makes the combined output from the two somewhat larger in 1904 than for that of five years ago, while the strongly paraffin petroleums of the new Kansas and some individual Texas fields have also added to the source of supply of desirable illuminants to such an extent as to be a matter of great importance, and to make the outlook for a continued supply of burning oil at the present time encouraging. The petroleum industry, however, is so kaleidoscopic that it is impossible to say whether there will be as great a change in the aspect in the next five years as there has been in the past. It will be a matter of interest to watch the development which may occur.

Change of Title.—Messrs. James Arnott and Son, oil importers and refiners, of Newcastle-upon-Tyne and Cardiff, write stating that, for family reasons, they have converted the business into a limited liability company under the style of "James Arnott and Sons, Ltd." The business will be carried on as heretofore, except that Mr. Charles Ernest Arnott will be a director.

The American Oil Market.

New York, Week ended Jan. 26th.

Terrific wind storms, high waters and rain storms covering the older oil fields did considerable damage and interrupted operations on the fields. Field reports were interrupted by wires having been laid low by the storms, and reports on field work were meagre. Heavy rains having made the roads impassable and checked the hauling of material to the fields. In the Pennsylvanian fields the damage by the wind storm is estimated at $30,000 to $40,000 alone in the Butler county oil fields where 200 to 300 derricks were blown down. In all of the fields thousands of derricks were levelled and the oil producers are the heaviest losers. In some localities pipe lines were swept away and a number of pumping wells were shut down. Most of the wells completed are still confined to the old defined limits. Prospects for large pools are not encouraging, as late completions have turned out nearly all dusters. There has been little new work started, and there was a further falling off the aggregate completion of wells. The pipe line is meeting and caring for the production of the Illinois field. In the Mid-Continent fields traffic on the roads has been suspended as they are impassable owing to the heavy rains. Field work has been tied up and work on the Texas pipe line is progressing slowly. The pipe line runs for the first half of January aggregated about 75,300 barrels daily, says the *Oil, Paint and Drug Reporter*, and the total runs amounted to 1,054,455 barrels. Shipments footed up 6,687 barrels increase over those for the same time in December. Stocks of oil shew an increase of 9,690,916 barrels in 1906 and 6,251,735 barrels in 1905. The production of the Glenn pool increased at an enormous rate. Oil placed in storage tankage amounted to 249,919 barrels. Reports from the Texas oil fields note that at Batson another good well was brought in which is flowing about 500 to 600 barrels a day. It is learned officially that the pipe line projected from the Indian Territory fields to Beaumont to be built by the Guffey Co. and associate companies is progressing satisfactorily. Among the oil men to-day there is renewed interest in operations at Humble. It is occasioned by the cheering reports that come from a well being developed. The price for Texas oil was advanced 3c. per barrel for oil in storage in all of their fields. The following are the prices of Texas oil as posted by the Texas Co.:—Sour Lake, 73c.; Saratoga, 63c.; Humble, 71c.; Jennings, 66c.; Shreveport, 66c.

Refined and Products.—The demand for refined was active and principally for export with fair sales to home consumers, and sales on the whole were fairly large. Prices underwent a sharp revision in the way of an advance in the export quotations at the close of last week, shewing a gain of 25 points on barrels and cases, and bulk goods were 10 points higher. This was attributed to the enhanced cost of cooperage and materials and partly to an increased demand from abroad.

The price for barrelled oil for export closed firm, and the market is quoted at 7·75c. for New York loading, and 7·70c. for Philadelphia loading. The principal foreign markets remained firm. Freight rates are steady at 2s. 2d. @ 3s. 0d. hence to London, and 2s. 3d. @ 3s. 0d. to Continental ports, as to port and vessel.

Cases for export were in active demand, and sales covered over 475,000 cases. The price of plain tops remained stationary at 10c. Freight rates continued firm and unchanged.

Crude for export remained quiet, and no sales were reported. Pennsylvania crude closed at 7·50c. in barrels. Cases for export have been quiet, and no sales have been reported.

CLOSING QUOTATIONS.

Crude.		Week ended Jan. 19. 1907.	Week ended Jan. 26. 1907.
National Tran. Certificates	pér bbl.	$1·58@1·59	$1·58@1·59
Pennsylvania crude in bbls.	per gal.	7·60	7·60
Pennsylvania crude in bulk	.. ..	4·50	4·50
Residuum, bbls. for export	.. ..	6@6½	6@6½

Crude at the Wells.

The quotations for oil represented by credit balances were ;—

	Week ended Jan. 26. 1906.	Week ended Jan. 26. 1907.
Tiona	1·68	1·68
Pennsylvania	1·58	1·58
North Lima	0·94	0·90
South Lima	0·89	0·85
Indiana	0·89	0·85
Canadian Oil:		
Petrolia	1·34	1·30

Refined—For Export.

		Week ended Jan. 19 1907.	Week ended Jan. 26. 1907.
Cargo Lots for export..	in barrels	7·50	7·75
	in bulk ..	4·40	4·50
Philadelphia loading ..	in barrels	7·45	7·70

Refined in Cases—110 Fire Test.

	Week ended Jan. 19.	Week ended Jan. 26.
3,000 to 10,000..	10·05	10·40
1,000 to 3,000..	10·20	10·45

Refined—Jobbing Lots.

In barrels, pkgs. included.

		Week ended Jan. 19.	Week ended Jan. 26.
120 fire test, S.W.	in barrels	12	12
130 fire test, S.W.	.. ..	12½	12½
150 fire test, W.W.	.. ..	13	13
In bulk from tanks	.. ..	10	10
300 fire test	.. ..	12¾@13½	12¾@13½

Naphtha and Gasolene.

	Week ended Jan. 19.	Week ended Jan. 26.
Naphtha, crude, car. lots, 68 @ 72 deg.	15·00	15·00
Gasolene, 86 deg...	23·00	23·00

Pennsylvanian Oil Runs from Jan. 18th to Jan. 24th were:—Jan. 18th, 128,008; Jan. 19th and 20th, 288,589; Jan. 21st, 128,192; Jan. 22nd, 107,632; Jan. 23rd, 66,079; Jan 24th, 163,035. For the month of December, 2,999,369.

The Deliveries of Pennsylvania Oil for the same dates were:—131,527; 242,273; 148,913; 139,700; 140,637; 184,546. For the month of Dec., 4,576,554.

Charters for the Week.

The total charters for refined, crude, naphtha, etc., in bulk, barrels and cases, during the week ended January 26th and from Jan. 1st, were as follows:—

	Week.	Year.	1906.
Refined, barrels and bulk	73,400	12,057,500	513,200
Refined, cases	475,000	18,639,100	1,551,000
Crude, barrels and bulk..	—	1,431,800	129,100
Crude, cases	—	325,000	25,000
Naphtha, barrels ..	—	277,300	44,600
Residuum, barrels	—	684,901	32,000
Lubricating, barrels	—	—	21,800
Total, barrels cde. eq.	266,659	24,504,989	1,524,647

Clearances for the Week.

During the week ended Jan. 26th, and since Jan. 1 the clearances of petroleum, in gallons, from the port of New York, were as follows:—

	Week.	Year.	1906.
Refined	10,040,700	37,857,200	21,092,330
Crude	203,020	203,020	7,700
Naphtha	348,500	629,650	1,034,450
Residuum	2,250	6,250	—

Export Statistics.

The total exports from the port of New York and from the United States have been:—

	Gallons.
From New York, week ended Jan. 25th	13,387,600
Total from New York, from Jan. 1st, 1907	50,076,399
Same period last year	28,134,140
Increase	21,942,259
From United States, week ended Jan. 25th	23,790,961
Total from United States, since Jan. 1, 1907	93,644,536
Same period last year	59,150,262
Increase	34,494,274

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The "Review" Shipping List.

February 15, 1907.

*(The following abbreviations are used in this table:—*L. Left; P. Passed; Arr. Arrived; Sp. Spoken; Tr. Trading.)

Vessel.	From.	For.	Latest Date and Position.
ALICE ISABELLE	Sables d'Olonne	Philadelphia	L. Feb. 7
ALCHYMIST	Avonmouth	Shoreham	Arr. Feb. 2
ALEMBIC	Sydney	New York	Arr. Jan. 15
AMERICAN	San Francisco	New York	Arr. Coronel, Jan. 10
APPALACHEE	Shanghai	San Francisco	Arr. Jan. 31
APSCHERON	St. Louis (Rhone)	Batoum	P. Constant'ple, Feb. 9
ARAL	Philadelphia	Copenhagen	P. Butt of Lewis, Feb. 13
ARAS	Philadelphia	Dover	L. Feb. 4
ARGYLL	Port Harford	Ancon	L. Dec. 31
ASTRAKHAN	Hamburg	Philadelphia	L. Tyne, Feb. 5
AUGUST KORFF	Manchester	Philadelphia	Arr. Feb. 4
AUREOLE	Tyne	New York	Arr. Jan. 25
ATLAS	Seattle	San Francisco	L. Jan. 16
AZOV	—	—	Trading on W. C. of South Amca.
BAKU STANDARD	Tyne	Kustendje	L. Feb. 12
BALAKANI	London	Port Arthur (Texas)	Arr. Feb. 4
BATOUM	London	Tyne	Arr. Feb. 2
BAYONNE	Hull	Tyne	Arr. Nov. 23
BEACON LIGHT	Philadelphia	Rouen	L. Feb. 4
BEME	Rangoon	Bombay and Mormugao	L. Jan. 24
BLOOMFIELD	Avonmouth	Philadelphia	Arr. Feb. 3
BORJOM	Batoum	Alexandria	L. Constant'ple, Feb. 2
BRILLIANT	Tyne	Philadelphia	Arr. Feb. 11
BROADMAYNE	Tyne	Port Arthur (Texas)	P. Dover, Feb. 6
BULLMOUTH	Shanghai	Balekpappan	Arr. Feb. 9
BULYSSES	Soesoe	—	Arr. Singapore, Feb. 11
BURGERMEISTER PETERSEN	Philadelphia	Hamburg	L. Feb. 8
CADAGUA	Rouen	Barry	Arr. Feb. 10
CALCUTTA	San Francisco	Shanghai	L. Jan. 13
CARDIUM	Cardiff	Balekpappan	P. Perim, Feb. 7
CATANIA	New York	San Francisco	Arr. Jan. 11
CAUCASIAN	Cardiff	Batoum	P. Scilly, Feb. 10
CHARLOIS	Rotterdam	Philadelphia	P. Scilly, Feb. 2
CHESAPEAKE	New York	Calcutta	At Port Said, Feb. 11
CHESTER	Antwerp	New York	P. Lizard, Jan. 26
CIRCASIAN PRINCE	—	—	Trading on W.C. of South Amca.
CLAM	Pulo Sambo	—	L. Madras, Feb. 3
COWRIE	Batoum	Bombay	L. Port Said, Feb. 10
COL. E. L. DRAKE	Sabine	New York	Arr. Jan. 12
CYMBELINE	London	Newport	Arr. Feb 11
CZAR NICOLAI II.	Hamburg	Batoum	P. Gibraltar, Feb. 3
DAGHESTAN	Antwerp	Batoum	Arr. Feb. 9
DELAWARE	Avonmouth	Batoum	P. Barry Island, Feb. 13
DEUTSCHLAND	Rotterdam	New York	P. Scilly, Feb. 10
DIAMANT	Hamburg	New York	L. Tyne, Jan. 31
ELAX	—	Tyne	Arr. Jan. 12
ELISE MARIE	Philadelphia	Christiana	L. Feb. 3
ENERGIE	New York	Rotterdam	L. Feb. 8
ERIVAN	Batoum	Antwerp	P. Constant'ple, Feb. 10
ETELKA	Batoum and Trieste	Fiume	Arr. Feb. 9
EUPLECTELA	London	Batoum	Off Ushant, Feb. 8
EXCELSIOR	Messina	Novorossisk	Arr. Feb. 3
EZIO	—	—	Coasting Peru
FRANCE MARIE	Philadelphia	Marseilles	P. Del. Break, Jan. 15
GEESTEMUNDE	Gothenburg	Philadelphia	L. Tyne, Feb. 12
GENESSE	Sunderland	New Orleans	Arr. Feb 13
GEORGIAN PRINCE	New York	Havana	L. Feb 1
GOLDMOUTH	Singapore	Aroe Bay	P. Anjer, Jan. 6
GUT HEIL	Philadelphia	Hamburg	Arr. Feb. 7
HAINAUT	New York	Antwerp	Arr. Jan. 29
HELIOS	Philadelphia	Nordenhamn	L. Feb. 6
HOTHAM NEWTON	Swansea	Batoum	P. Mumbles, Feb. 8
HOUSATONIC	Bengkalis (Sumatra)	London	Arr. Las Palmas, Feb. 5
IMPERIAL	—	—	Tr. on Lakes btn. U.S. and Can.
JOANNIS COUTZIS	Batoum	Bo'ness	Arr. Gibraltar, Feb. 9
J. B. AUG. KESSLER	Palembang	Rotterdam	Off I. of W., Feb. 12
JAMES BRAND	Kustendje	Rouen	Arr. Feb. 11
JULES HENRY	Marseilles	Philadelphia	L. Jan. 16
KURA	Penarth	Philadephila	L. Feb. 4
LA CAMPINE	Antwerp	New York	Arr. Jan. 27
LA FLANDRE	Ghent	Philadelphia	P. Portland Bill, Feb. 12
LA HESBAYE	Antwerp	New York	Arr. Feb. 5
LA MADELEINE	Nantes	Huelva	Arr. Jan. 31
LA VIGUESA	Philadelphia	Seville	P. Del. Break, Jan. 20
LACKAWANNA	New York	Calcutta	Arr. Jan. 23
LANSING	Honolulu	Port Harford	Arr. Jan. 17
LE COQ	Kustendje	Emden	Arr. Marseilles, Feb. 8
LOUTSCH	Barcelona	Novorossisk	P. Dardanelles, Jan. 10
LUCERNA	Bergen	Tyne	Arr. Feb. 10
LUCIFER	Philadelphia	Liverpool	L. Feb. 2
LUCIGEN	Philadelphia	Flushing	P. Del. Break., Feb. 1
LUCILINE	Philadelphia	Cette	P. Sagres, Feb. 10
LUMEN	Tyne	Philadelphia	P. Dunnet Head, Jan. 31
LUX	Rouen	Philadelphia	P. Lizard, Feb. 2
MANHATTAN	Philadelphia	Savona	Arr. Feb. 7
MANNHEIM	Tyne	Philadelphia	P. Nantucket, Feb, 13
MARGARETHA	Alexandria	Batoum	P. Dardenelles, Jan. 29
MAVERICK	New York	San Francisco	Arr. Jan. 2
METEOR	Nicolaieff	Genoa	Arr. Feb. 1
MEXICAN PRINCE	Hull	Cuba	L. Feb. 2
MIRA	Rotterdam	Tyne	Arr. Feb. 12
MUREX	Hong Kong	Shanghai	Arr. Feb. 5
NARRAGANSETT	New York	London	P. Dover, Feb. 13
NERITE	—	—	Tr. in China Seas
NEW YORK	New York	—	L. Feb. 9
OCEAN	Amsterdam	New York	Arr. Feb. 12
OILFIELD	Barry	Philadelphia	Arr. Jan. 29
ORANJE PRINCE	Flushing	Tyne	Arr. Jan. 13
ORIFLAMME	Novorossisk	Havre	L. Constant'ple, Feb. 1
OSCEOLA	Genoa	Cape Verds	P. Gibraltar, Jan. 12
OTTAWA	Philadelphia	Galveston & Vera Cruz	L. Reedy Island, Jan. 27
OURAL	Dunkirk	Batoum	P. Constant'ple, Feb. 9
PALEMBANG	—	—	Tr. Sts. Settlem'ts & China Seas
PAULA	Amsterdam	New York	Arr. Jan. 31
PECTAN	London and Emden	Galveston	Arr. Feb. 13
PENNOIL	Tyne	Philadelphia	Arr. Feb 8
PERLAK	Batavia	Palembang	L. Jan. 6
PHOEBUS	New York	Thameshaven	P. Lizard, Feb. 13
PINNA	Hamburg	New York	Arr. Jan. 30
POTOMAC	Manchester	Philadelphia	P. Old Head of Kinsale, Feb. 4
PROMETHEUS	Rotterdam	New York	Arr. Feb. 6

Vessel.	From.	For.	Latest Date and Position.
PRUDENTIA	Port Arthur (Texas)	Dover	P. Cape Henry, Jan. 30
QUEVILLY	Philadelphia	Rouen	P. Havre, Feb. 11
RION	Penarth	Philadelphia	P. Barry Island, Jan. 31
ROCK LIGHT	London	Port Arthur (Texas)	Sp. Jan. 27, 47N. 15W.
ROSSIJA	Tyne	Messina	Arr. Feb. 1
ROTTERDAM	Rotterdam	New York	Off I. of W., Feb. 10
RUSSIAN PRINCE	Antwerp	Cienfuegos	L. Key West, Jan. 29
SALAHADJI	—	—	Tr. Sts. Settlem'ts and Java Seas
SAXOLEINE	Tyne	Philadelphia	P. Dunnet Head, Feb. 12
SEMINOLE	San Francisco	Kurrachee	L. Jan. 6
SILVERLIP	Cardiff	Balekpappan	L. Colombo, Feb. 8
SINGU	—	—	Tr. in East Indies
SNOWFLAKE	Penarth	Novorossisk	Arr. Feb. 9
SOPHIE	Alexandria	Batoum	P. Dardanelles, Feb. 5
SPONDILUS	Cardiff	Port Said	P. Malta, Feb. 11
STANDARD	Hamburg	New York	In Tyne, Feb. 1
STROMBUS	Cardiff	New York	Arr. Feb. 7
SURAM	Tyne	Philadelphia	Arr. Feb. 13
SUWANEE	Philadelphia	Barrow	P. Del. Break., Jan. 31
SVIET	Batoum	Odessa	L. Dec. 26
TELENA	Singapore	—	L. Feb. 3
TEREK	Hamburg	New York	Arr. Jan 30
TIFLIS	Hamburg	Tyne	Arr. Feb. 12
TIOGA	Galveston	Philadelphia	L. Jan. 28
TONAWANDA	San Francisco	Shanghai	L. Jan. 18
TROCAS	Yokohama	Palembang	Arr. Feb. 9
TURBO	Barry	Batoum	L. Constant'ple Feb. 5
TUSCARORA	Shanghai	San Francisco	L. Moji, Jan. 23
TWINGONE	Rangoon	Madras	L Feb. 1
VEDRA	Cardiff	Philadelphia	L. Feb. 1
VILLE DE DIEPPE	—	—	In Port Havre, Feb. 6
VILLE DE DOUAI	Philadelphia	Dunkirk	P. Del. Break., Feb. 1
VOLUTE	Yokohama	—	L. Feb. 2
WASHINGTON	Kustendje	Bombay	Arr. Jan. 26
WEEHAWKEN	New York	Hull	Arr. Feb. 12
WILLKOMMEN	New York	Plymouth	Arr. Feb. 13
WINNEBAGO	Shimonoseki	San Francisco	Arr. Feb. 10

Latest Market Intelligence.

LONDON OIL MARKET.

Supplied by Messrs. Benjamin & Gee, 31, St. Mary Axe, E.C.

February 15th, 1907.

Refined Petroleum is unaltered, the latest importers' quotations being as follows:—Russian and Roumanian, 6¼d.-6⅜d.; American, 6¾d.-6⅞d.; Water White, 7¾d.-7⅞d.

LUBRICATING OILS

are unchanged, and are quoted:—

American pale, £7 7s. 6d. to £11.
American dark cylinder, from £7 12s.
American filtered cylinder, from £11.
Shellene, £5.
No. 1 Russian, £10 7s. 6d.

TURPENTINE.

American Turpentine is still very firm, and is quoted for Spot 51s. 3d., and for March to June 51s. 9d.

LIVERPOOL OIL MARKET.

February 14th.

Refined oils are quiet, and sellers quote 6½d. for Russian, Galician or Roumanian; and 6⅝d. to 7⅝d. per gallon for American.

Petroleum Spirit continues at 1s. 0½d. to 1s. 3d. per gallon for American deodorised, according to quality on the spot.

LATEST AMERICAN PRICES.

New York, February 14th.

Refined, in cases, is steady at 10·10 Standard White, 7·60; Credit balances, 1·60c.

Philadelphia, February 14th.

Standard White is still quoted at 7·45.

RUSSIA.

Baku, February 9th.

The Baku oil market is firm. Light crude oil, spot, 25¼–25¾ copecs per pood; residuals, in ships, spot, 26½; for kerosene in ships, delivery during navigation, 28 copecs.

BELGIUM.

Antwerp, February 9th.

The petroleum market is stronger. Price of Standard White, spot, 20½ francsper 100 kilos; February, March and April 20¾ francs.

FRANCE.

Paris, February 9th.

Illuminating oil is quoted in bulk, in whole tank waggons, 22 francs per hectolitre; spirit, 29·25 francs per hectolitre. Special white oil, 30 francs per hectolitre.

GERMANY.

Hamburg, February 9th.

The kerosene market is firm. The price of American Standard White is 6·80 marks per 50 kilos, Russian, 6·55 marks.

ROUMANIA.

February 9th.

	Francs.
Crude oil from different fields, including pipe line charges, per 100 kgs.	4·00-4·10
Refined oil, exclusive of taxes	13·00- —
Motor benzine, including taxes	16·00-18·00
Benzine, doubly refined	24·00-25·00
Residuals in tank waggons, at refinery	3·20-3·30
Paraffin	120·00-125·00
Lubricating Oils—	
Agricultural	30-32
Prime	35-37
Extra	40-42
Royal	45-46

In barrels free on rail including octro tax of 12 fcs. per 100 kilcs

Prices for Export.

Refined oil in tank waggons, per 100 kgs.	8·50- —
Benzine, sp. gr. 0·710-0·715	21·00-22·00
„ sp. gr. 0·720-0·725	19·00-20·00
„ sp. gr. 0·730-0·740	13·00-14·00
„ sp. gr. 0·745-0·755	9·00-10·00

INDIA.

Bombay, January 30th.

Petroleum is steady.

Standard Oil Co., of New York.

Current rates are:—

American, "Snowflake," 150 deg.	Rs. 6	0	2
„ Chester, 125 deg.	4	8	2
„ Monkey Brand, 125 deg.	4	0	2
„ Bulk, 125 deg. (in local made tins)	3	10	0
„ „ 125 deg. (8 Imperial gallons)	3	0	0
„ "White Camelia" brand, 125 deg.	No stock.		

The Asiatic Petroleum Company, Limited.

Current rates are:—

"Swan" Brand oil, in tins, per pair	3	2	0
Sumatra "Rising Sun," bulk, per unit	3	0	0
„ „ tins, per pair	3	10	0
Silverlight cases, per case	4	8	0
Sumatra, "Anchor" per case	4	14	0

FOR COASTING TRADE.

A SEA-GOING OIL TANKER is at liberty for coasting trade in the United Kingdom. The gross tonnage of the vessel is 59,053 gross, and 54,537 nett. Deadweight capacity: 1078 tons on 11 feet 3 inches draught. Ten tanks are provided, all these being about of equal dimensions.—Apply "Oil Tanker," Petroleum Review, 45, St. Mary Axe, E.C.

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IMPORTS of PETROLEUM into UNITED KINGDOM

Specially prepared for this Journal by the Custom House.

FOR THE WEEK ENDED FEBRUARY 4TH, 1907—

Date.	Port and Importers.	Description.	No. of Gals.	Port Whence.
Jan.	LONDON—			
29	Anglo-American Oil Co.	Lub.	21,600	Philadel.
29	London & India Docks Co.	"	4,000	Hamburg
29	" "	"	1,000	Antwerp
30	"	Lub. Gr.	400	New York
30	Lubricating & Fuel Oils, Ld.	Lub.	8,200	Philadel.
30	Consolidated Petroleum Co. (Euplectela)	Lamp	1,394,600	Batoum
Feb.				
1	" (Cymbeline)	Gas	677,950	Philadel.
1	Anglo-American Oil Co. (Cymbeline)	"	903,930	"
1	T. H. Lee	Lub.	180	Hamburg
2	Lubricating & Fuel Oils, Ld.	"	4,100	Philadel.
4	A. Brown and Co.	"	7,600	"
4	"	"	2,000	Hamburg
4	Fielder, Hickman and Co.	Lub.Gr.	2,400	Ghent
4	G. W. Sheldon and Co.	"	1,330	New York
4	Page, Son and East	"	440	Antwerp
Jan.	LIVERPOOL—			
29	A. Hopps and Sons	Lub.	2,480	Baltimore
29	W. W. Jones, Dooly and Co.	Lub.Gr.	460	New York
30	Geo. B. Taylor	Lub.	25,800	"
30	Stockdale and Doel	"	4,720	Boston
30	Vacuum Oil Co.	"	20,000	Philadel.
Feb.				
1	George B. Taylor	"	102,560	New York
1	Liverpool Storage Co.	"	600	"
1	"	"	27,320	Philadel.
2	W. B. Dick and Co.	"	6,790	"
2	Worthington and Boler	"	5,600	"
2	Crew, Levick and Co.	"	22,600	"
4	Meade-King, Robinson & Co.	"	42,000	"
4	" "	"	4,800	Baltimore
4	" "	"	14,560	Hamburg
4	W. H. Knott and Sons	L. Paste	240	"
4	Pickfords	"	810	"
4	Penwarden and Jackson	L.Comp	200	Antwerp
4	Crew, Levick and Co.	Resid.	5,860	Newp't Nws.
4	W. Gibson and Sons	Lamp	2,050	Boston
4	Vacuum Oil Co.	Lub.	3,960	New York
4	Valvoline Oil Co.	"	1,640	"
Jan.	BRISTOL—			
29	H. R. James and Sons	"	11,440	"
29	"	M.Colza	1,440	"
31	First Anglo-Russian Oil Co.	Lub.	260	Antwerp
31	Pickford's, Ltd.	"	220	Hamburg
	GRIMSBY—			
29	J. Sutcliffe and Son	"	360	"
29	"	"	390	Antwerp
Jan.	HULL—			
29	Wilsons and N.E. Railway Shipping Co.	"	840	"
29	" "	"	8,000	New York
29	W. Gilyott and Co.	"	8,000	Trieste
29	Hull & Netherlands S.S. Co.	Tar Oil	2,400	Rotterdam
29	"	"	2,400	"
31	"	"	2,280	"
31	T. Meredith Roberts and Co.	Lub.	250	Antwerp
31	Wilsons and N.E. Railway Shipping Co.	"	360	"
31	" "	"	700	Hamburg
	MANCHESTER—			
29	J. T. Fletcher and Co.	"	1,180	Antwerp
29	Geo. B. Taylor	"	150,800	New York
29	A. H. Dawson and Co.	"	4,800	"
29	W. Hodgson and Co.	Lub.Gr.	960	"
Feb.				
2	"	Lub.	18,010	Riga
2	Liverpool Storage Co.	"	240	Hamburg
2	"	"	4,910	New York
2	Anglo-American Oil Co. (Potomac)	Lamp	649,360	"
Jan.	MIDDLESBRO'—			
30	E. Harris and Co.	Lub.	360	Antwerp
	NEWCASTLE—			
29	Tyne-Tees Steamship Co.	"	2,840	"
29	P. H. Matthiessen and Co.	"	370	Bergen
Feb.	SWANSEA—			
2	Richards, Turpin and Co.	"	1,200	New York
	DUNDEE—			
2	D. Alexander and Sons	Crude	400	Hamburg
Jan.	GLASGOW—			
29	Clyde Shipping Co.	Lub. Gr.	210	Antwerp
Feb.	GRANGEMOUTH—			
1	W. Graham-Yooll and Co.	Lamp	2,000	Hamburg
Jan.	LEITH—			
29	Henderson and McIntosh	Lub.	12,920	Philadel.
31	W. Graham-Yooll and Co.	Lamp	6,320	Hamburg
31	J. Currie and Co.	Lub.	2,000	"
Feb.				
1	W. Gibson and Co.	"	600	Antwerp
2	J. Cormack and Co.	"	2,800	Riga
2	W. Graham-Yooll and Co.	Lamp	9,160	Hamburg
Jan.	DUBLIN—			
30	Alliance and Dublin Consumers' Gas Co. (Caucasian)	Gas	745,000	Philadel.
	Total for Week		4,980,560	

MIDLAND RY-CARRIAGE & WAGON CO., LTD., & Reduced.

Midland Works,

BIRMINGHAM.

—BUILDERS OF—

OIL AND OTHER

TANK WAGONS,

And Every Description of Rolling Stock

With WOOD or STEEL

UNDERFRAMES.

Anglo-American Oil Co., Ltd.,

SOLE IMPORTERS

Finest American Lamp Oils

WHITE ROSE

. and .

ROYAL DAYLIGHT.

Pratt's Motor Spirit

PACKED IN SEALED TWO GALLON CANS.

Universally used by all leading Motor Manufacturers, Motorists, Railway and Motor Bus Companies.

IN USE AND FOR SALE EVERYWHERE.

QUALITY TELLS.

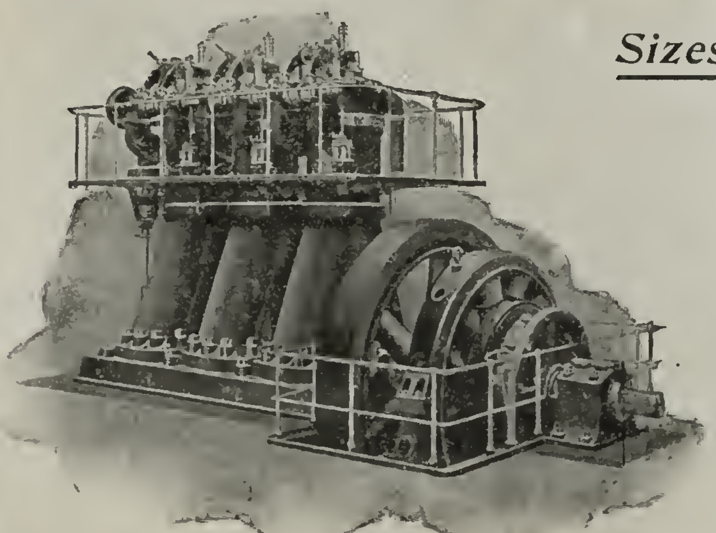
To Dealers only.

FOR THE WEEK ENDING FEBRUARY 11TH, 1907—

Date.	Port and Importers.	Description.	No. of Galls.	Port Whence.
Jan.	LONDON—			
5	Humphrey and Co.	Lub.	6,440	New York
6	G. W. Sheldon and Co.	,,	1,060	,,
6	Scott's Wharf	,,	4,000	,,
6	C. Price and Co.	,,	380	Antwerp
7	Page, Son and East	Lub.Gr.	80	,,
7	J. C. Goodall	Lub.	1,970	,,
7	Burt, Boulton and Heywood	C.Naph.	2,000	Terneuzen
7	London and India Dock Co.	Lub.	3,000	Hamburg
7	,,	Fuel	40	Colombo
7	B. Jacob and Sons	Lub.	4,000	Philadel.
7	Anglo-American Oil Co.	,,	144,400	New York
7	Fielder, Hickman and Co.	,,	6,800	,,
8	G. and H. Green	,,	3,330	,,
8	London and India Dock Co.	Lub.Gr.	480	,,
8	J. Spurling	,,	240	,,
8	Anglo-American Oil Co.	Lub.	18,000	Philadel.
8	T. H. Lee	,,	160	Hamburg
8	Schliemans Oil Co.	,,	4,670	,,
8	Produce Brokers	,,	2,800	,,
11	Lub. and Fuel Oils, Ltd.	,,	10,660	,,
11	Page, Son and East	,,	320	Antwerp
11	G. W. Sheldon and Co.	,,	590	New York
11	,,	L.Comp.	870	,,
	LIVERPOOL—			
5	Liverpool Storage Co.	Lub.	3,600	New York
5	Burnaby and Chantrell	L.Comp.	500	Hamburg
6	Meade-King, Robinson & Co.	Resid.	10,000	Trieste
6	,,	,,	2,000	Hamburg
7	Pickford's	Lub.	670	,,
8	Liverpool Storage Co	,,	2,800	Stettin
11	Geo. B. Taylor	,,	400	New York
11	Meade-King, Robinson & Co.	,,	2,400	Philadel.
11	Evan Leigh and Son	,,	2,000	Boston
11	A. Hopps and Sons	M.Colza	6,000	Baltimore
	BRISTOL—			
5	H. R. James and Sons	,,	23,200	New York
5	,,	Lub.	5,000	,,
5	F. F. Fox and Co.	,,	1,000	,,
5	W. Smith and Co.	,,	11,200	,,
5	,,	Lamp	15,000	,,
9	Anglo-American Oil Co. (Delaware)	,,	1,137,900	Philadel.
9	,, ,,	Gas	127,400	,,
9	Anglo-Bosphorus Oil Co.	Lub.	3,600	Hamburg
	GOOLE—			
8	Goole Steam Shipping Co.	,,	600	Antwerp
	GRIMSBY—			
8	J. Sutcliffe and Sons	,,	150	,,
9	,,	,,	200	,,
	HULL—			
5	W. Gilyott and Co.	,,	10,400	Hamburg
5	,,	,,	18,400	New York
7	Wilsons and N.E. Railway Shipping Co.	,,	1,200	Riga
7	,, ,,	,,	640	Hamburg
7	,, ,,	,,	920	,,
7	,, ,,	,,	5,760	Antwerp
Jan.	MANCHESTER—			
5	Schofield and Co.	,,	2,150	Reval
5	,,	,,	2,740	Hamburg
5	J. T. Fletcher and Co.	Lub. Gr.	320	Antwerp
5	Manchester Liners	M.Colza	2,000	Philadel.
5	George B. Taylor	Lub.	146,880	,,
5	Crew, Levick and Co.	,,	10,830	,,
5	,,	M.Colza	9,400	,,
7	Morton and Sons	Lub.	2,960	,,
7	Meade-King, Robinson & Co.	,,	47,600	,,
7	,,	,,	10,400	Hamburg
	NEWCASTLE—			
5	Tyne-Tees S.S. Co.	,,	600	,,
5	,,	,,	2,520	Antwerp
	SWANSEA—			
7	T. H. Crouch	,,	1,280	Amsterdam
	DUNDEE—			
7	D. Alexander and Sons	Crude	400	Hamburg
	GLASGOW—			
7	Clyde Steamship Co.	Lub.	530	Antwerp
7	Burrell and Son	Resid.	4,000	Fiume
9	J. and A. Allan	Lub.	9,100	Philadel.
	GRANGEMOUTH—			
6	J. Currie and Co.	,,	890	Hamburg
6	W. Graham-Yooll and Co.	Lamp	6,000	,,
6	J. Currie and Co.	Lub.	400	,,
	LEITH—			
5	J. Currie and Co.	,,	150	,,
5	W. Graham-Yooll and Co.	Lamp	12,160	,,
5	G. Gibson and Co.	Lub.	160	Antwerp
5	,,	,,	280	,,
7	J. Currie and Co.	,,	1,200	Hamburg
7	W. Graham-Yooll	Lamp	13,080	,,
9	,,	,,	10,200	,,
	BELFAST—			
5	J. C. Pinkerton and Co.	Lub.	240	,,
	Total for the Week		1,907,720	
	Total for the past Fortnight		6,888,260	

To Correct previous returns ;—

Date.	Port and Importers.	Description.	No. of Galls.	Port Whence.
	Add—			
	MANCHESTER—			
21/1	General Petroleum Co. (Scandinavian)	Kerosene	12,710	Antwerp
	BELFAST—			
15/1	Consolidated Petroleum Co. (Caucasian)	Gas	39,410	Philadel.
	Deduct—			
	BELFAST—			
17/1	Consolidated Petroleum Co. (San Christobel)	Lamp	161,990	New York
	LONDON—			
2/1	E. J. Wilkinshaw	Lub.	10,000	Philadel.



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The Petroleum Review.

By PAUL DVORKOVITZ.

Vol. XVI. *(New Series.)* March 2nd, 1907. No. 393.

Editorial Notes.

How the Baku Strike has Injured the Production.

The strike among the workmen in the Baku oil fields has had a considerable effect upon the production during January, as might have been expected, some of the operating companies having suffered rather severely. The Moscow-Caucasian Co., and also Messrs. Mantascheff and Co., stand out very prominent in this respect, the production of the former firm during the month having been reduced from the usual 2,000,000 poods or upwards to about 600,000 poods, whilst Messrs. Mantascheff's output has been reduced just one half. The English companies have suffered but slightly, if at all, though for the month, the production of the Baku-Russian Co. is about 200,000 poods less than the total for December. Nevertheless, it still stands far ahead of its sister company, the Russian Petroleum and Liquid Fuel Co., whose production for January was only 700,000 poods. The Schibaieff Co. heads the list of English operating companies with 1,100,000 poods to its credit.

The Admiralty and Oil Fuel.

The British Admiralty are apparently going ahead as fast as circumstances will permit in regard to the general adoption of liquid fuel upon all its ocean-going craft, and in this respect it is significant to note that during the past few days two vessels have been launched, in the construction of which preference has been given to the claims of liquid fuel as against coal. Other torpedo destroyers are at present being built upon which oil fuel will be used—a fact which says much for the opinion of the Admiralty in regard to oil as a power. That our Admiralty are going into the matter in no half-hearted manner is also seen by the efforts that are now being put forward to secure suitable sites for the erection of storage accommodation around our shores. At Devonport, it will be remembered, large storages have already been erected, but it has now been decided to provide storage room at the naval ports in order to have oil fuel sufficient at any time for a fleet at Sheerness, Portsmouth, Gibraltar, Malta and other bases. The accommodation at each of the places will, we learn from Admiralty circles, be for several thousand tons. One all-important factor which has led our authorities to go in so extensively for the use of liquid fuel is the enormous saving which will make itself immediately seen in the annual coal bill. The present coaling bill, including the cost of labour and craft, is somewhere in the region of £1,800,000, and it is now estimated that this can be directly reduced by at least 20 per cent. by using oil fuel.

The Oil Shales of Scotland.

In the past, the Scotch shale oil industry has been a branch of our national trade about which the average commercial man had but very hazy notions. Detailed accounts either of the geology of the oil shale fields in Scotland, or the methods of working them, were very conspicuous by their absence, but now all this is removed by the publication of a Government book dealing in a most exhaustive manner with the oil shale industry of the Lothians. The various authors of the work—and there have been four of them—are gentlemen well qualified to speak upon the subjects with which they deal, and the result is the production of an exceedingly instructive work. In our present issue we give a brief summary of the principal points touched upon by Mr. Caldwell who has been responsible for the portion of the work dealing with the methods of working the shale, and in our next issue we hope to refer to other chapters in this very timely publication.

Galicia and its New Combine.

The new organisation in the Galician petroleum industry is coming in for a little more than its fair share of attention just now, and the general question asked is, "Will it succeed?" Upon this point there are many grave doubts. The new organisation, it will possibly be recollected, has been joined by the majority of the crude oil producers, but, as yet, has not been joined by the refining firms who are also producers. The refiners make their adhesion to the combine conditional upon the receipt of a guarantee that the price of crude oil will not be raised excessively. Their proposition—which seems to us to be very reasonable—is that the price of crude oil shall be fixed at three kronen per 100 kilos., the cost of refining and transforming into kerosene and other products at four kronen, and the net profits of the sales, both for home consumption and export, shall, through the medium of a central bureau, be divided equally between the producers and refiners. The latter condition, however, is one upon which the chances of success are very remote, particularly in view of the establishment of new refineries in Austria and Hungary, and the enlargement of several refineries—a fact which will create almost unlimited difficulties in apportioning to each refinery its share in the market.

The Struggle in Roumania.

In our last issue we referred to what we called an interesting situation which has occurred in Roumania consequent upon the Romano-American Co. having commenced to sell their oils direct to the dealers in various parts of the kingdom. It is safe to assume that whatever unpleasantness this policy may cause to the members of the refiners' cartel, in whose hands the home petroleum trade has been centred for more than a decade, the newly adopted policy of the Romano-American Co. will be received with open hands of welcome by the Roumanian consumers, to whom it will mean a not inconsiderable saving. Whether justifiable or not, the bureau of the refiners' cartel has in the past succeeded in keeping the price of illuminating

ing oil so high upon the home markets that consumption has been severely checked. Elsewhere we give the approximate figures that have been charged, and it will be seen that these are practically double those generally ruling for export trade, the difference thus representing a profit to the various firms to whose keeping the home petroleum markets of Roumania have been. Now, however, everything gives promise that a new and much preferable order will prevail. The Romano-American Co. seeing the determined attempt that has been made on the Roumanian market to keep up prices to the great detriment of the extension of the home markets, say, "We will have none of it." Hence they are appealing direct to the traders with prices about 15 per cent. below those which the traders have been forced to pay in the past, and though this, on the one hand, has caused no little consternation among the general body of refiners, it has, on the other, the undivided support of all petroleum consumers in Roumania.

◆

THE TIN PLATE MARKET.

Messrs. Norton, Owen & Co., of 4, Bishopsgate Street Within, London, E.C., report under date 28th February, 1907, as follows :—

There has been more business doing, and at an influential meeting of the trade held at Swansea on Tuesday last, a large number of makers, comprising the principal producers of oil plates, agreed to fix the undermentioned as their minimum prices until further notice. This combined action, they state, has become absolutely necessary on account of the ruinous underselling which has been going on for some weeks past.

IC	$18\frac{3}{4} \times 14$	124 sheets	110 lbs.	15/3 to 15/4½	per box.
IC	$19\frac{1}{4} \times 14$	120 ,,	110 ,,	15/3 ,, 15/4½	,,
IC	20×10	225 ,,	156 ,,	21/4 ,, 21/6	,,

F.o.b. Welsh ports, according to position of works. Tin lining and iron hooping extra.

◆

DETAILS OF BATOUM PETROLEUM SHIPMENTS DURING 1906.

The following were the detailed shipments of various petroleum products in 1906 (in poods) :—

	To Foreign Ports.	To Russian Ports.	Total.
Refined kerosene ..	17,692,844	3,602,149	21,294,993
Solar oil (light) ..	1,425,754	34,157	1,459,911
Pyronaphtha, astraline, etc.	—	8,208	8,208
Machine oil, refined ..	5,555,973	214,414	5,770,387
,, ,, distillate..	120,238	98,672	218,910
Spindle oil	657,039	30,799	687,838
Cylinder oil	117,569	19,670	137,239
Heavy solar oil.. ..	35,483	14,241	49,724
Sabonaphtha, vaseline, etc.	4,106	869	4,975
Residuals	1,051,036	26,475	1,077,511
Goudron, etc.	—	1,155	1,155
Total in 1906..	26,660,042	4,050,867	30,710,909
,, 1905..	36,544,679	3,047,989	39,592,668

LONDON OIL SHARE MARKET.

Friday, March 1st, 1907.

Business in the Oil Share section of the London Stock Exchange has been of an irregular tendency since we last wrote ; for while Californian issues have strengthened in price and remain at best, and the Shell Transport Co. has received some little attention, which resulted in an improvement of 6d. per share in the Ordinary ; both Schibaieffs and Russians have evinced weakness, and shew little inclination to recover the declines registered.

The following is a *resumé* of the fortnight's movements : Anglo-Russians 0-$\frac{1}{8}$, Assam Oil $\frac{5}{8}$-$\frac{3}{4}$, Baku Ordinary 2s. 6d. to 3s. 6d., Preference 5s. to 6s., Bibi-Eybats, $\frac{3}{8}$-$\frac{1}{2}$, Debentures, 84-89, Californian Oilfields $5\frac{1}{2}$-6, Refineries $1\frac{5}{8}$-$1\frac{7}{8}$, European Preference $\frac{1}{16}$-$\frac{3}{16}$, Debentures 82-86, Russian Ordinary 8s. 6d. to 9s. 6d., Preference 10s. to 11s., Debentures 90-93, Schibaieff Ordinary 5s. 6d. to 6s. 6d., Preference 2-$2\frac{1}{2}$, Shell Transport Ordinary 37s. to 38s., Preference $9\frac{1}{2}$-10, and Spies $\frac{17}{32}$-$\frac{19}{32}$; and the first change occurred on the subsequent Wednesday, when some good buying of Californian Refineries put the price up $\frac{1}{8}$ to $1\frac{3}{4}$-2, while on Thursday Shell Transport Ordinary improved 6d. per share, closing strong at 37s. 6d. to 38s. 6d. The market then remained stationary until the following Monday, when Californian Oilfields rose $\frac{1}{4}$ to $5\frac{3}{4}$-$6\frac{1}{4}$. Tuesday's dealings resulted in some selling of Schibaieff Ordinary, which caused a decline of 1s. per share, closing price being only 4s. 6d. to 5s. 6d.; and on Wednesday the weakness extended to Russian Ordinary, which lost a similar amount, closing 7s. 6d. to 8s. 6d., while on Thursday a further shrinkage in the prices of both Ordinary and Preference resulted in an additional loss of 6d. on balance at 7s. to 8s. and 9s. 6d. to 10s. 6d. respectively, and of 1 point in the Debentures at 89 to 92.

At the end-February Settlement which commenced on Tuesday last, Contango rates shewed a little easier tendency than for some time past, but the account to be adjusted in Miscellaneous Shares generally was of very moderate dimensions. Changes in the "making up" prices of oil shares from those fixed at the middle of the month are not very important, and vary somewhat—for while Californian Oilfields at $5\frac{7}{8}$ have risen $\frac{5}{16}$ and Shell Transport Ordinary $\frac{1}{32}$ at $1\frac{29}{32}$, Schibaieff Ordinary have lost 1s. at $\frac{1}{4}$, and the Preference $\frac{3}{8}$ at $2\frac{1}{8}$. Russian Preference are also lower, losing 6d. at $\frac{1}{2}$, and Baku Preference are 3d. easier at $\frac{1}{4}$, Anglo-Russians at 1s., Baku Ordinary at 3s., Russian Ordinary at 9s., and Spies at $\frac{9}{16}$ being without change.

CLASSIFIED IMPORTS INTO UNITED KINGDOM UP TO FEBRUARY 25th, 1907.

IN GALLONS.

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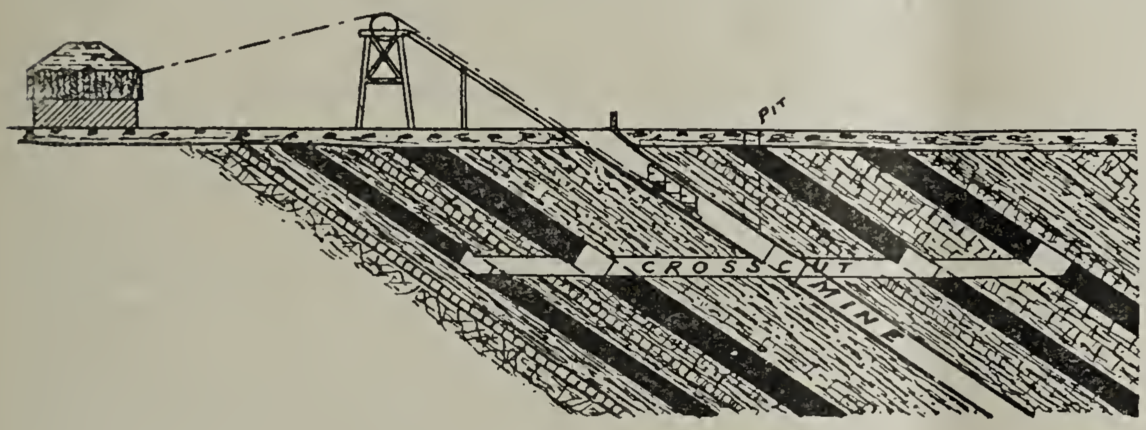
Country.	Illuminating.		Lubricating.		Residuals.		Gas Oil. (Solar)		Benzine.		Fuel Oil.		Other Descriptions.		Totals.	
	Since Feb. 11.	From Jan. 1.	Since Feb. 11.	From Jan. 1.	Since Feb. 11.	From Jan 1.	Since Feb. 11.	From Jan 1.	Since Feb. 11.	From Jan. 1.	Since Feb. 11.	From Jan. 1.	Since Feb. 11.	From Jan. 1.	Since Feb. 11.	From Jan. 1.
Austria ...	—	—	8,000	29,640	8,000	32,000	—	—	—	—	—	—	—	—	16,000	61,640
Belgium ...	—	153,410	26,390	84,200	—	—	—	—	—	—	—	—	—	590	26,390	238,200
Canada ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dutch India.	—	—	—	—	—	—	—	—	2,452,250	4,540,830	—	—	—	—	2,452,250	4,540,830
Germany ...	36,540	1,024,350	78,260	305,660	—	2,000	—	—	—	—	—	—	400	1,800	115,200	1,333,810
Holland ...	—	—	160	1,440	—	—	—	—	2,800	87,430	—	—	4,700	25,620	7,660	114,490
Roumania ...	—	1,102,830	—	—	—	—	—	1,065,900	—	591,450	—	126,700	—	—	—	2,886,880
Russia ...	—	4,237,880	7,950	814,810	—	—	—	—	600	600	—	—	—	—	8,550	5,053,290
U.S.A. ...	7,112,890	16,645,260	1,467,,910	6,010,330	4,930	10,790	2,292,530	8,727,340	425,600	426,110	—	—	37,960	383,540	11,341,820	32,203,370
Other Countries	—	—	5,320	6,610	—	—	—	—	—	2,500	—	40	—	240	5,320	9,390
	7,149 430	23,163,730	1,593,990	7,252,690	12 930	44,790	2,292,530	9,793,240	2,881,250	5,648,920	—	126,740	43,060	411,790	13,973,190	46,441,900

THE OIL INDUSTRY IN SCOTLAND.

HOW THE SHALES ARE WORKED.

The publication which has been issued from the Geological Survey of the United Kingdom, dealing with the oil shale industry of the Lothians, deserves to occupy a foremost place among the very limited number of treatises published in reference to the Scotch oil industry. It is in three parts, the second portion—dealing with the methods of working the shales—being the most instructive account that has ever yet appeared upon this subject. The author of this portion of the work is Mr. W. Caldwell, whose experience as mining manager of the Pumpherston field well qualifies him to deal with this part of the subject.

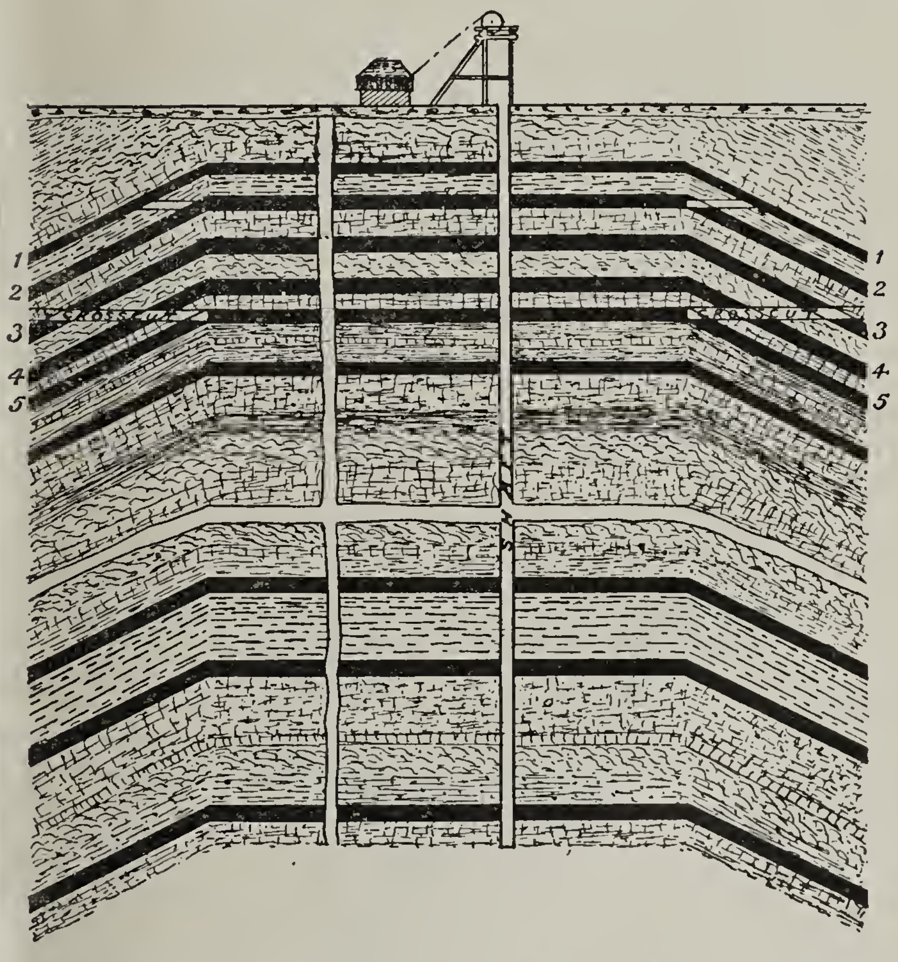


After a suitable spot has been decided upon as offering prospects for encountering shale in commercial quantities, boreholes are sunk. For this work the percursive method of hand boring is usually carried out, but of recent years the diamond bore has been extensively used, and from its revolving action a solid core is obtained which readily shows the character and inclination of the strata passed through. When a seam of shale has been found by boring operations, and the exact position and depth of outcrop determined, it is necessary before sinking a mine to put down a trial shaft for the purpose of making sure as to the true gradient at which the shale is lying, and the thickness and quality of the seam. The mode of access to the seams of the Pumpherston shales is illustrated in the first sketch. Here it will be seen there are five seams dipping from 29 degrees to 38 degrees, and the mine is driven in the middle seam, the other seams being entered by level cross-cut mines driven from one to another, and each is worked separately, the cross-cut shewn in the diagram serving the purposes of communication and transit. Another series of oil shales is illustrated in the second sketch. This series is known as the Mid-Calder, and the mode of access is by a vertical shaft.

The usual dimensions of the inclined shaft are a width of from ten to twelve feet, and the height is from six to eight feet. If the sides of the shaft proved to be of a soft nature, as is generally the case with the shale at the crop, walls are run up and the roof is supported by larch crowns, but where the shale is hard and the roof good, then the less costly method of timbering is adopted. In many cases the supports to the roof are fixed "centre" fashion, dividing the shaft into two unequal parts. The smaller division has a width of a little over three feet, and is generally used for haulage ropes and water pipes, while the larger is for winding. During the progress of sinking, levels are broken away in the seam at regular distances, and driven so as to get communication with, and drive headings to form, the outlet mine. These headings are driven in the same direction as the sinking mine to the levels above, until they connect with the outlet mine or shaft. The outlet mine is then used for winding the shale, and the other is kept for sinking purposes. Thus, winding and sinking can go on simultaneously.

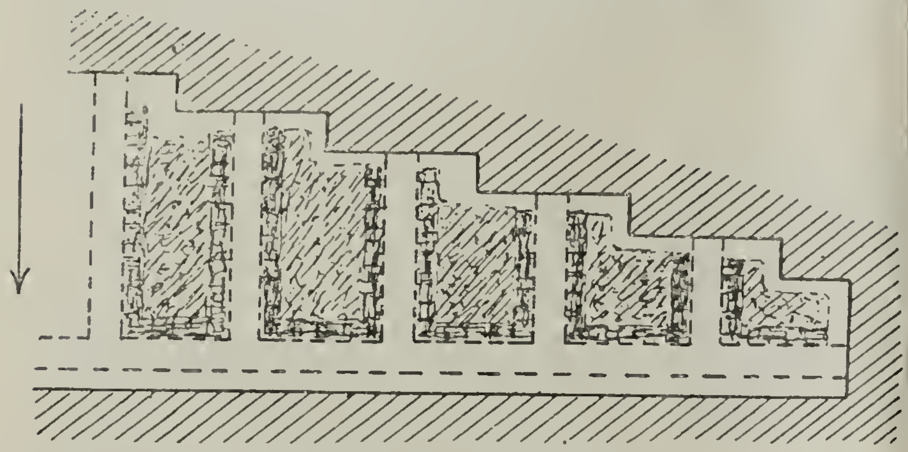
The hutches containing the shale are either hauled direct to the surface or conveyed there by sinking-carriage. This carriage is used where the seam is lying at a steep angle, and is preferable to hutches on account of the greater safety to the men working at the face, as it is seldom derailed. The carriage has two decks, the higher or top one being for the hutch, and the lower serving as a platform, on which to throw the shale for filling the hutch.

While sinking is in progress, the water is taken away from the face by pumps, various types and designs of which are used. A small "sinking" pump, which can be moved forward and connected easily as the sinking proceeds, is used at the face, and when it has reached the distance at which it can throw water to the surface, a "sump" is formed in the side of the mine. A sinking pump then delivers into the sump, and another pump is put down at that point to deliver the water at the surface. This is repeated as the mine proceeds, the water being delivered at the surface in lifts or stages.



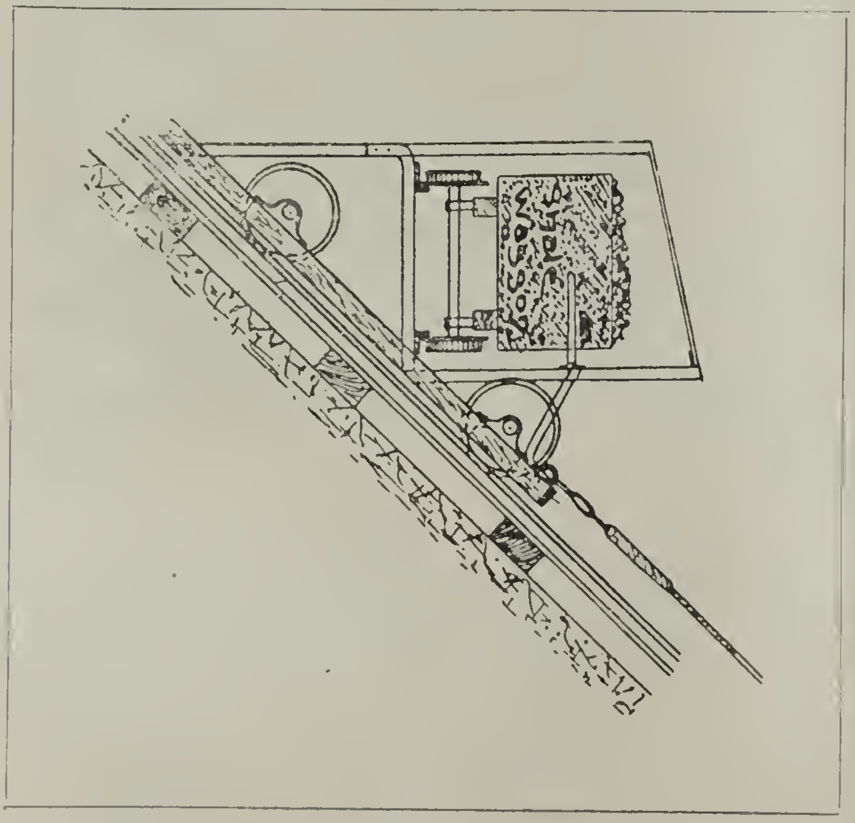
The level driving in a shale mine is carried on by hand labour with the aid of a hand boring machine. Before beginning to drive a level, however, the miner makes an examination and then decides upon the portion of the seam likely to make the best holing-bed off which to blow the shale freely. Then the blasting takes place, and the shale is liberated from the seam. Except in special circumstances, gunpowder is the explosive used for blasting shale, its slow combustion causing a rending action and producing less small debris than any of the other known agents.

The shale seams vary from four to ten feet in thickness, say seven feet as an average, and on the whole they are comparatively free from blaes, fakes, and ribs of unproductive rock. With a thickness of seven feet, experience shews that the method best adapted for the efficient working of the shale is "stoop and room," but in the case of two seams of shale, separated by a bed of fakes or other foreign material of sufficient thickness for packing, the long wall method may prove to be more suitable.



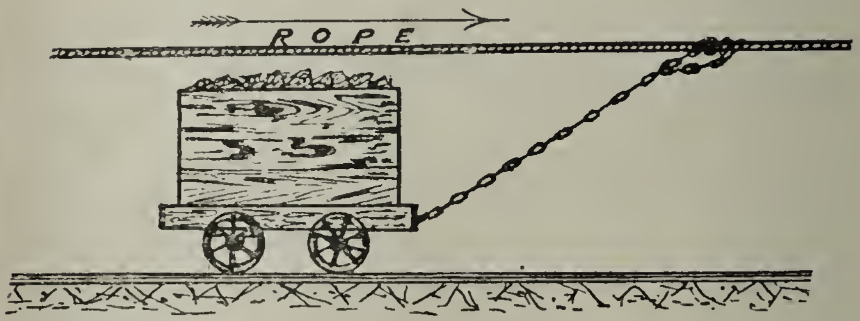
Working Shale in Steps.

The "stoop and room" method, however, is more generally used throughout the shale district than any other, its chief characteristics being the (1) "whole" or first working, and (2) the broken or second working. The whole working consists in a series of excavations made in the shale, whereby it is divided into rectangular blocks or pillars. These excavations are called rooms, one set being driven at right angles to the dip of the shale, and at regular distances from one another, and commonly called levels; another set driven to the rise of these levels and at right angles to them, being commonly known as "ends" or "upsets." The latter are broken off the levels at regular intervals and driven upwards to meet the levels above. As the roof pillars are for the purpose of supporting the superincumbent strata, their size calls for special attention. In highly inclined workings the stoops or pillars are made longer to the rise than at right angles to the dip, because the inclination of the seam decreases the actual supporting area of the stoops, and inclined stoops, under the great weight of the overlying rocks have a marked tendency to slip.



One of the difficulties associated with the mining of shale (as indeed in ordinary coal mining) is "creep," which, when it starts, is almost certain to bring about much destruction. The first indication of "creep" is given by the heaving or lifting up of the pavement of the "rooms," causing the timber to bend and break, and the rails of the hutch roadway to become twisted and displaced. It is primarily caused by leaving small "stoops," which are unable to stand the strain they have to bear. When the weight of the overlying strata bears heavily upon these weak supports, they begin to sink, and in so doing, bring down the roof, force up the pavement and fill the rooms.

The author then proceeds to deal with the removal of the "stoops," and the working of the Longwall system, coming then to the question of working shale seams contiguous to each other.



In the Pumpherston shale field there are five seams, separated from each other by beds of blaes and fakes varying in thickness from eight to fourteen feet, the total thickness, including seams and dirt, being 92 feet. The average inclination of the seams is 37 degrees, and the method of working is stoop and room. Two inclined shafts are driven from the surface in the middle seam, levels being cut right and left at regular intervals, and when these are carried to a distance of 120 feet, cross-cuts are broken off and driven to the upper and lower seams. Access is got to all the seams by cross-cuts, and the levels are continued to the boundary or such distance as may be required. The usual ends or upsets are driven until connected with the levels above; and by this means the ventilation is effected, the cross-cuts acting as the intake airways, and the foul air finding its way to the exhaust fan through the upsets. When the levels have been cut, stooping is commenced; No. 1 or top seam being dealt with first, and the others in rotation from the surface. In the first or solid working, a piece of shale about eight inches thick is usually left on the roof for support, but is recovered during stooping. At the Roman Camp Mine of the Broxburn Oil Co., the curly shale - 14 to 18 inches thick - in the No. 3 seam, is not removed during the first working, and forms an admirable roof until it is removed at stooping.

In a few instances, the Longwall face, instead of being carried in a straight line, is worked in steps as may be seen from the accompanying sketch, one place being in advance of another. At Oakbank Pit, Mid-Calder, the Dunnett seam, which is in two parts, separated by a bed of calmy blaes about three and a-half feet thick, has been extensively worked on this method. Operations are begun in the bottom seam, the holing being done with the pick in the calmy blaes. The miner holes as far as he can reach —probably 3 feet—and brings down the shale by blasting, the process being repeated until he penetrates a distance of 9 to 12 feet from the face of the brushing at roadhead. The excavation extends the whole length of the wall, which measures 15 yards along the shale face – the roads being 9 feet wide.

While the lower seam is being worked, the calmy blaes is supported by props set at intervals, the roadways on both sides being built of old railway sleepers or old waggon timber cut to the required sizes, and formed into pillars 3 or 4 feet square, and erected from 3 to 4 feet apart.

When the shale is removed in the bottom working, the props are drawn, with the exception of a row standing about three feet from the face, this being left for the purpose of breaking off the calmy blaes and allowing the miner room to resume operations in this working. The props at roadhead are drawn last, and the calmy blaes which parts freely from the top portion of the seam, is allowed to fall. The top portion of the seam is then dealt with, the roof being temporarily supported by props and an occasional timber pillar, until the calmy blaes has been brushed and built on the road sides, when timber pillars, similar to those in the bottom working, are built on the top of the blaes and close to the roof.

Speaking of the working of vertical shale seams, the author points out that the Drumshoreland basin, which is a construction of the Oakbank basin, was opened out a few years ago to the south of Pumpherston anticline, three seams were found under quite unusual conditions at a vertical depth of 360 feet. The mode of access to these is shewn in the illustration No. 3 on this page, from which it will be seen that at one side of the basin these are in a vertical position. In this case, the method adopted is to cut levels on both sides of the mine in the seams passed through, and when driven a sufficient distance, cross-cuts are made to the other seams, this being repeated until all the vertical part is penetrated, one level being below another, as shewn in the drawing. Connection between the levels is obtained by driving steep upsets. In driving the levels, the shale is taken out to the thickness of the seam in its natural position, and the height is from ten to twelve feet. This is properly called the first working, and when the levels reach the boundary, stooping is commenced by taking a slice ten to fifteen feet thick from the stoops and working out to a safe distance from the inclined shaft. Another slice is then taken off, working in towards the boundary, and so on until the whole of the available shale has been recovered.

The gases found in shale workings, though not of the volume of those found in coal seams, are of an explosive and dangerous character; the most common being fire damp, this being given off by the strata.

The shale when loosened from its natural bed is placed in "hutches," which are taken to the bottom of the shaft by horse haulage or chain haulage, and the journey to the pit mouth is then commenced. In inclined shafts the "hutches" are either drawn up in trains or "rakes," or upon a carriage with level platforms, electric power having been adopted for this purpose by the Oakbank and the other oil companies of late.

GROSNY PETROLEUM PRODUCERS' CONFERENCE.

The annual conference of the Grosny petroleum producers, which opened on the 7th February, has now closed with rather poor results. The junior assistant governor of the Terek Province, promised to construct roads to the oil fields, at the expense of the Cossack Administration, even if it will be necessary to spend 250,000 roubles on it. It was resolved to abolish the technical committee for the preservation of the oil fields, which proved itself so useful in enforcing the water shut-off regulations. The larger firms have resolved to separate themselves out into a special group, and to establish their own hospital to be maintained by them without the aid of the common fund. A new council has been elected. At this conference the Provincial Administration shewed itself more sympathetic towards the needs of the petroleum producers, and many requests which were formerly refused have now been promised to be granted. The schools and the statistical service are in utter neglect. The amount voted for the police has been increased. The levy on the producers for 1907 has been fixed at $\frac{1}{10}$ copec per pood of oil produced.

LATEST INFORMATION FROM GROSNY.

The following are a few facts concerning the conditions at the Grosny oil fields :—The Akhverdoff Co. has a production of 45,000 poods per day. The expectations of spouters from two wells have not been realised, and the three old spouting wells have become pumping wells, with only slight occasional eruptions. The Spies Co. and the Anglo-Russian Maximoff are producing 17,000 poods daily each, with a great difference between the number of wells owned by each of these firms. The Spies Co. is preparing to start two boreholes on the large plots of the Grosny Oil Co., in the eastern part of the field, and one well on plot No. 43 of the same company, and is also starting a well on a new prospecting plot in the western part of the field. On plot No. 40, the Spies Co. has already six boreholes. The executors of Mr. Maximoff are extending their operations on plots Nos. 15, 26 and 7. The Vladicaucasian Co., which had three boreholes on plot No. 168, is giving up operations.

OIL FUEL FOR NEW TORPEDO DESTROYERS.

Following upon the advent of liquid fuel in connection with the Admiralty, the new ocean-going vessels built for the British Navy, are being built so as to use the new fuel in preference to coal. A few days ago two Admiralty vessels—one an ocean-going torpedo boat destroyer of a size and power which has not hitherto been attempted—were launched at Birkenhead. The speed of the destroyer is to be 33 knots per hour, which will make her and the other four vessels of her class now building the fastest vessels afloat. Propulsion will be derived from triple screws, driven by turbine engines, made by the builders under Parson's licence. This vessel is 270 feet long, 26 feet in breadth, and 15 feet 6 inches in depth, and one of the new features incorporated in her construction will be the adaptation of the boilers to the consumption of oil fuel.

After the launching ceremonies and during the following lunch, Mr. J. M. Laird, in proposing "Success to H.M.S. 'Cossack,'" said the "Cossack" was a very interesting vessel from the point of view of the designers and contractors. She was the pioneer of a new class of destroyer which, it was hoped, would render previous efforts obsolete and out of date. She was designed to have a speed greatly in excess of any other vessel afloat, and they were that day in the proud position of being the first firm to launch such a vessel. Certain novelties were being introduced into the vessel, notably the use of oil fuel and the installation of the turbine, the result of which would be the obtaining of a speed never before achieved on the sea.

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THE PETROLEUM TRADE OF YOKOHAMA DURING 1906.

Our excellent contemporary journal, the *Oil, Paint and Drug Reporter*, of America, publishes an account in its special supplement issued recently, of the Yokohama petroleum market during 1906. From this we learn that the illuminating oil market in Yokohama was fairly steady throughout the past year and prices ruled high. The import duty on refined lamp oil is very heavy, amounting to about 67s. a ton, so as to favour the native Japanese industry. The production of crude oil in Japan has for several years been maintained at about 120,000 tons, but the quantity of lamp oil obtained from the crude oil is not nearly sufficient for the consumption in Japan, besides which the illuminating oil obtained is to a large extent inferior in quality to that imported from America and Russia and the production of the Eastern fields. Still, with such a large margin as 67s. per ton in their favour the producers in Japan have every incentive to increase their production and to obtain the maximum quantity possible from their fields, the outturn from which is capable of considerable extension.

During the past year some prominent oil men from California visited Japan and concluded a contract with some of the largest oil merchants in Japan to supply them with Californian crude oil, which the Japanese merchants intend to refine locally and thus obtain the benefits of the lower duty on the crude article.

The Standard Oil Co. are making arrangements to commence the importation of oil in bulk by tank steamers from California in the same way that they are doing already in several ports in China, and will then convert the trade they are at present doing in illuminating oil imported in tins packed in wooden boxes by oil imported in bulk and packed on the spot in the same way that Russian and Eastern lamp oils have been sold for years past.

During 1906 no Russian oil was imported to Japan, either in bulk or in cases. The prices ruling in Russia were such as would have excluded the oil being sold profitably, even if the available supplies had permitted the exporters to sell Russian lamp oil for export to Japan; and as the case oil factories in Russia were closed until recently no case oil has been shipped to Japan. Even in 1905 the export to Japan of Russian oil was very small. On the other hand, the imports of American case oil have increased considerably, and, whereas in 1905 the importation of American lamp oil was about 3,900,000 cases, the total for 1906 reached the figure of 4,500,000, or an increase of 600,000 cases. The imports from the Eastern fields, having fallen off during last year, has enabled the Standard Oil Co. to increase their trade.

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PETROLEUM SHIPMENTS FROM BATOUM.

The shipments of petroleum products from Batoum during the week ended 3rd February (o.s.), 1907, were as follows:—

	Illuminating Oil.		Other Products.	
	1906.	1907.	1906.	1907.
To Europe ..	—	273,000	—	421,000
To the East ..	—	1.015,000	—	—
To Russian Ports	36,000	—	8,000	4,000
From 1st Jan. to Feb. 3rd:—				
To Europe ..	955,000	642,000	257,000	1,088,000
To the East ..	616,000	2,676,000	—	1,000
To Russian Ports	513,000	127,000	13,000	14,000

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SUGGESTED OIL STORAGE ACCOMMODATION AT GRANGEMOUTH.

Grangemouth has recently been visited by a company of commercial gentlemen with a view of ascertaining what facilities the port offered for the loading of oil tank steamers direct from tanks. The new dock works recently completed were inspected by the deputation and after careful investigation and inquiries it was found that there was a site between the original lighthouse at the mouth of Carron River and the present new docks where large tanks for storing oil could be erected which would enable steamers to load oil in bulk with great despatch. The matter, it is understood, has been under consideration for more than a year, and the engineers on the new dock works have submitted various plans in connection with the subject. The members of the deputation were of the opinion that Grangemouth was a suitable port for this class of trade. It is fully anticipated that the visit will result in a new industry being established in Grangemouth.

THE CANADIAN PETROLEUM INDUSTRY.

PETROLEUM IN NEARLY EVERY PROVINCE.

The Canadian Geographical Survey have paid special attention during the past year to the Canadian mineral oil industry, and one of the members of its staff was instructed to visit, during the field season, the localities where boring operations were being carried on, more particularly new fields, in order to draw up a reliable and unbiased report on the subject.

That the Canadian oil industry is far from declining is shewn by the fact that the production in 1905 exceeded that of 1904 by over 300,000 barrels, and though the figures for 1906 are not yet available, it is generally believed that these will shew even higher figures.

Ontario is still responsible for almost the whole of this output, although very active operations in search of oil have been going on for the past two years and a-half in all parts of Canada, from Nova Scotia to the northern parts of British Columbia. It would seem as if the bounty of one and-a-half cents per gallon of crude petroleum produced, which came into force when the Dominion Government put crude oil on the free list, had greatly stimulated prospecting and boring for oil; results have followed this activity; the limits of some of the older producing fields have been extended, new pools have been discovered, and new areas are being energetically prospected.

Anticipating the report of the Government officials, it is well to point out that in Nova Scotia oil has long been known to occur, the most promising locality being in the Lake Ainslee district, Cape Breton island. In 1905 and also during last year boring operations for oil have been going on actively. The syndicate operating there intend to go on with the work during the present year.

Another locality in Nova Scotia where a borehole in search of oil was recently put down is at Cheverie, where a depth of over 1,000 feet has been reached. Operations will also be continued there.

New Brunswick has a small producing field at Memramcook, where several wells are regularly pumped, although the output is small. There exists, however, in New Brunswick a possible source of petroleum, which perhaps has not received all the attention that it deserves. In Albert county there exists large deposits of bituminous or oil-bearing shales, from which oil could be extracted by distillation, and these deposits under prudent and careful management may yet become a feature in the Canadian oil industry. The possibilities of these oil-bearing shales have at different times been mentioned by members of the Canadian Geological Survey.

In Gaspe, province of Quebec, operations in search of oil have been carried on for the last ten years on a very large scale, but the results, so far, have been disappointing. More than 50 holes have been bored, one of which reached a depth of 3,700 feet.

Ontario is responsible for practically the total Canadian oil production. The following fields are located in the south-western peninsula between Lake Huron and Erie. The older oil pools, or oil-producing areas, have been described at different times, and it will be sufficient to mention here that the Petrolia district has been yielding since 1862, the Oil Springs pool is about contemporaneous, and since then other oil areas have at various times been brought in, such as Bothwell, Moore Leamington, Dutton, Thamesville, Wheatly, Tilbury and others, most of which are included in the counties of Lambton, Kent, Essex.

The features of the oil industry in Western Ontario has been the discovery of the new producing areas of East Tilbury township, where a pool, which promises well, was struck in the vicinity of Bothwell.

On Manitoulin island, as has already been mentioned in the REVIEW, boring operations were actively carried on during 1905 by five different companies. This field, however, has not yet contributed to the Canadian production of oil.

In Western Canada throughout all the provinces a great deal of energy is being displayed in prospecting for petroleum. In Manitoba boreholes are being put down at two places at least where surface indications had been reported, or where signs of the presence of oil were said to have been found on sinking wells for water. One of these places is at Manitou in Southern Manitoba, and the other is at Neepawa, on the Minnedosa branch of the Canadian Pacific Railway.

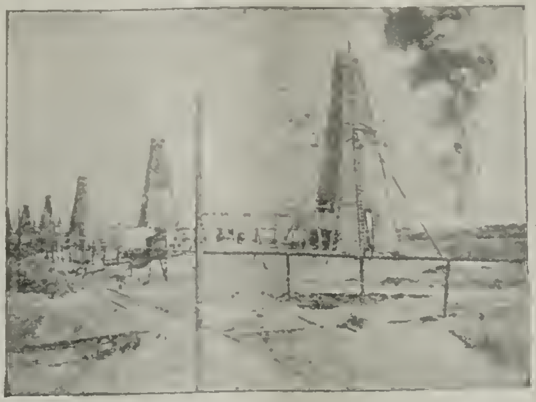
Deep boring operations are also being carried on in Saskatchewan and in Alberta. The latter province is more especially prominent in this direction. There are at present some twelve or fifteen deep drilling rigs, prospecting various areas between the international boundary on the south and lower part of Athabaska river in the north.

In South-western Alberta, as readers of the REVIEW will recollect, oil has been struck in two wells at depths slightly exceeding 1,000 feet. It is reported that these wells could be pumped and made to yield; but the lack of means of transportation is a drawback at present. However, prospecting is going on very actively, and should the results obtained in this section, which lies south-west of Pincher Creek, justify it, a pipe line or a railway spur, both of which are very feasible, would be constructed. At Calgary and at Medicine Hat drilling rigs are in operation, and at the latter place provision has been made to reach a depth of 3,000 feet. In the northern part of Alberta the search for petroleum is being carried on in the vicinity of Fort McMurray, on the Athabaska river, some three hundred miles north of Edmonton. The extensive outcrops of tar-sands in this region have frequently been referred to by various members of the Geological Survey. These certainly indicate the presence of oil-bearing strata, and there is little doubt that where the underground structure and other conditions are favourable, large accumulations of oil have gathered, and this far-north-country may become quite a factor in the production of petroleum in Canada.

In British Columbia, two companies were working in South-east Kootenay in 1906. The depths reached in this district are not yet sufficient to be conclusive.

Some work was also being carried on in the Cariboo district, from where very promising indications have been reported.

RUSSIAN . . AND ROUMANIAN . . NOTES.



A Bebe-Aibat Spouter.—An intermittent spouter is flowing on Mr. Zoubaloff's property at Bebe-Aibat.

The First Boring Company has taken up a contract to drill four wells for the Steaua Romana at Moinesti in the Bacau district.

The Baku Strike.—A telegram from Baku, dated the 19th February, says the strike continues on the properties of the Mantascheff Co., Mirzoeff Bros., Aramazd Co. and Russian Naphtha Co.

The Romano-American Co. continues to compete against the Roumanian refiners' cartel, and has reduced the prices of illuminating oil from 24 to 22 francs per 100 kilos. The cartel was compelled to follow suit and lower its price to the same level.

Increased Kerosene Prices.—From Perm comes the news that, in consequence of the alarming news of strikes received from Baku, the local merchants, who distribute oil in the Ural provinces and Siberia, have raised the price of kerosene by 15 per cent.

Strike Follows Strike.—A telegram from Baku, dated the 21st February, announces that the strike on the property of the Russian Naphtha Co. has come to an end, but another strike broke out on the Zoubaloff property. The Zoubaloff spouter was still flowing.

Refinery Proposals.—The proposal that the refineries of the Steaua Romana shall be transferred to a company to be specially formed, and in which the Steaua Romana shall be interested jointly with the Regatul Roman Co., has apparently failed, and the Regatul Romana Co. is now considering the question of acquiring an interest in the Aurorä Co,

Permission to Exploit Cancelled.—The Mines Office for the Caucasus has, in consequence of the expiration of the time limit for beginning exploitation, cancelled the concessions granted to Mrs. and Mr. Eyschitzky on plots Nos. 31, 190, 219, 223, 224 and 430 in the Djevat district, and declared such plots open for fresh applications.

To Operate in Tiflis.—Prince A. Z. Tchelokaeff is organising a company under the title of the Matani Petroleum Co., of Kachetia, for the purpose of developing two plots of petroliferous land belonging to him, and situated in the Tionet district of the of the province of Tiflis, of an aggregate area of 6,528 acres. The capital of the company is to be 500,000 roubles.

The Regatul Roman Co.—At a meeting of the directors of the Regatul Roman Co., held recently in Paris, Mr. Raky proposed that the Regatul Roman Co. should take shares in the Roumanian boring company recently formed under the title of A. Raky. The group of capitalists interested in the Regatul Roman Co. contemplate placing the shares of that company on the Paris Stock Exchange.

Fire Damage at Moreni.—In the night of February 9th a fire broke out at Moreni which destroyed the boiler house, workshops, electric station, etc., of the Regatul Roman Co. The damage done by the fire is estimated at 100,000 francs. The actual loss will be greater as all work will have to stop until the buildings and machinery are replaced. There was no loss of life, and the fire did not spread to the wells.

To Prospect in Arctic Europe.—The Russian Government propose to undertake boring operations with a view to the proper exploration of the oil deposits in the Petchora district. It is estimated that the cost of the first borehole and all expenses connected therewith will amount to 85,000 roubles, the subsequent boreholes will cost less. It has been recognised that the private enterprises now operating in the Petchora oil region do not possess sufficient means for a thorough exploration.

Strikers Return to Work.—The strike on the Zoubaloff property came to an end on 22nd February.

"For Surface Use Only."—The Russian Government has sanctioned the leasing to the Moscow-Volga Bebe-Aibat Co. of two plots of land at Bebe-Aibat, Nos. 22 and 28, for surface use only.

Very Gloomy.—The stocks of residuals at Moscow are becoming exhausted owing to irregular working of the Kazan and Nijni Railways. The arrivals of fuel oil are very small, and the market is threatened with serious complications.

Wholesale Resignations.—Messrs. Walter Langer, Hector Economos and G. Heine have resigned their positions as managing directors of the Regatul Roman Co., and Mr. Anton Raky is left the only managing director of the company.

Baicoi Successes.—The borehole of the Credit Petrolifer at Baicoi, situated near the school, has struck a rich oil stratum. Well No. 3, of the Regatul Roman Co., in the same field, continues to spout intermittently, yielding a large quantity of oil.

Another Moreni Fire.—Another fire occurred at Moreni on the night of the 10th of February. The scene was the property of the Romano-American Co., the fire being caused by a defective liquid fuel burner. There was no loss of life, and the material damage was also small.

Back to Coal.—The Transcaucasian Railway, notwithstanding its proximity to the centre of petroleum production, has decided to replace oil fuel by coal on their locomotives and at the pumping stations of the pipe line. In view of the great advance in the price of oil, coal now works out cheaper by far.

The Reclaimating of Bebe-Aibat Bay.—As a result of the representations made by firms owning properties near the part of Bebe-Aibat which it is proposed to reclaim, the Minister of Trade and Industry has agreed, with a view to safeguarding the interests of those firms, that the plans for the reclamation shall be worked out by agreement with those firms.

Effect of the Strikes.—The effects of the strikes at Baku are beginning to be felt at Batoum, particularly by firms who deal in purchased oil. The export of bulk oil to European markets remains small. Alexandria is now the destination of frequent cargoes of bulk oil, shipped for the account of the Mantascheff Co. and of the Shell Co., for packing in tins at the local case factories. The price of case oil stands at 1·50 roubles per pair of tins.

Mantascheff's Case Oil Factory Fire.—A fire broke out at the Mantascheff's case oil works a few days ago, and destroyed or damaged about 300,000 cases of oils destined for shipment by an ocean steamer, and also a warehouse. The loss is estimated at 300,000 roubles. There are indications that the fire was due to incendiarism. Fortunately the sections where the manufacture and filling of the cases is done has escaped, and it will therefore be possible to restart the works very shortly. Only one quarter of the loss is covered by insurance.

The Speranta Co., from whom the Romano-American Co. holds most of its producing land, held their annual meeting on the 10th of February. The directors, in their report, declared themselves satisfied with the work done by the Romano-American Co. on the company's land, the total number of boreholes drilled up to 31st October, 1906, was 30, of which 12 were producing. The Romano-American Co. are obliged under their agreement to drill 10 more wells in course of this year. During the financial year the company had a total revenue of 60,013 francs, which left a net profit of 6,934 francs. The capital is 1,500,000 francs.

OIL FUEL ON SHIPBOARD.

DISCUSSION UPON MR. HUME'S PAPER.

In our last issue, upon pages 93 and 94, we published a very interesting paper which was presented to the members of the Institute of Marine Engineers the other week upon the subject of "Oil Fuel on Shipboard," by Mr. Hume. On that occasion, the discussion was adjourned for another evening, so that in the meantime the members might have the opportunity of carefully perusing the paper, and formulating questions in regard thereto.

This subsequent meeting for the discussion of Mr. Hume's paper was held at the Institute, Romford Road, Stratford, E., on Monday, February 18th, the chair being occupied by Mr. W. C. Roberts.

Mr. W. Lawrie, who occupied the chair on the previous occasion, resumed the discussion. He said that when Mr. Hume read his paper, the members who took part in the discussion congratulated the writer upon the general excellence of it, and the speaker believed that the more they studied it, the more they would find that it contained a very great amount of information upon a subject of which in the past marine engineers had known very little.

Before Mr. Hume had contributed his paper, the knowledge of the advantages of liquid fuel was possessed by but very few marine engineers. It was information that could not very well be got at by the ordinary sea-going engineer, who was more or less used to coal fuel. It was very difficult for anyone to find any fault with the paper, which carried him back to the time when Sir Marcus Samuel addressing them said that his firm was allowing thousands of tons of fuel to run to waste because there was no market for it. So far as he had ever heard engineers speak against oil fuel, it was in regard to the idea that the flame was very fierce on the boiler plates. It seemed to him that the intensity of flame must more or less affect the plates. The number of advantages gained by using oil fuel more than compensated, however, for the little difficulties that might arise. It surprised him somewhat to learn that the Wallsend Slipway and Engineering Co. had turned out no fewer than 80 oil-burning steamers. He would like to know what trades those vessels were engaged in? Then in regard to settling tanks. They had to pump the oil in, and then allow the water to separate and fall to the bottom. That seemed to him a crude way of separating the water from the oil. Would it not be possible to devise some more scientific method of removing the water?

Mr. W. E. Farenden (P. & O. Co.) believed it had been found from actual results that one pound of oil was equal to about 1·75 pounds of coal. A much smaller quantity of air was required to burn oil than coal. Would Mr. Hume explain the method usually adopted in cleaning out the tanks? He thought the repairs to certain parts of the boiler would be more when burning oil than when burning coal. He would like to know how high the flash point would have to be?

Mr. Frank Cooper, R.N.R., said Mr. Hume had made out a clear case in favour of oil as against coal. He had made out that it was as cheap as coal, as efficient, took up less space, and entailed less labour, besides the tremendous advantage of doing away with coaling days, which anybody who had been in the East would be very glad to get rid of at almost any sacrifice. He supposed that one reason why oil had not been adopted more generally was our national conservatism. Another cause was that they could not get oil fuel at every port – not, at any rate, at the present time. With reference to the flash point the previous speaker had raised, he believed that their president some time ago told them that the oil fuel used had such a high flash point that a red-hot poker could be dropped into it and no harm would be done. He thought the paper was one of the finest they had had at the institute for many a day.

Mr. J. Anderson said that in reading through the paper one or two points occurred to him. There was the question of capital expenditure *versus* wages on an oil-burning steamer. When they installed oil it decreased the number of men in the stokehold, but on the other hand, one would almost require an engineer in charge of the stokehold, instead of a fireman. In the navy he thought it had been found necessary to put a competent man in charge of the stokehold. The question was whether the cost of the auxiliaries, plus the extra work in oil tanks, etc, would not counterbalance the saving in wages due to the decrease in the number of stokers. Mention had been made of dirt getting into the oil. He was once on a trial trip where a steamer was "hung up" owing to the dirt getting into the filters. It was most necessary that there should be a complete double installation of filters, so that one set could be overhauled while the other set was in use. He would like to know why it was necessary to use iron and not copper pipes in the installation? He desired to thank Mr. Hume for his very interesting paper, and he was sure every member of the institute was indebted to him.

Mr. F. M. Timpson referred to the question of cost, quoting the case of a steamer called the "Caledonian," which had to go back to coal, after burning oil most successfully, because of the increase in the price of oil. He knew of two yachts that were fitted for burning oil, but had to go back to coal, owing to the excessive smoke given off when they were steaming with oil fuel. The matter had to be considered from a commercial point of view, and in his opinion the oil burning installation, with its necessary tanks, was an expensive one.

Mr. Stewart enquired which system of burning oil fuel Mr. Hume would recommend, seeing that he had mentioned three in his paper. He also asked if there were any line of steamers except those carrying oil which were being run at present on oil fuel.

Mr. Peter Smith did not think there was any question about the success of oil as fuel, for it had been pretty well proved that it could be used very successfully. He knew the driver of the Royal train on the Great Eastern Railway, and he spoke very highly indeed of the fuel. But it resolved itself into a question of cost. Directly they began to use oil fuel largely for marine purposes, the price would become prohibitive. Therefore, he was inclined to think that oil fuel could never be used on a large scale.

Mr. Hume then replied. In regard to the effect that oil fuel had on boiler plates, he thought it was less than by using coal. With the latter, whenever the furnace doors were opened the cold air rushed in. When burning oil the furnace doors did not require to be opened throughout the voyage, and a constant heat would be maintained throughout. The vessels built so far for burning oil fuel belonged to the "Shell" Co. principally. Some general cargo boats, however, had been fitted up, while an installation was put into the "Kensington" for the burning of oil fuel, but owing to the restrictions put upon it by the Dock Co. for loading facilities the idea was abandoned. Referring to the settling tanks, he said that when they took oil bunkers on board they were supposed to get oil, but occasionally water got in through a leaky rivet-hole. It was necessary to have settling tanks to get rid of the water. The only system was to heat the oil so that the water fell to the bottom of the tank. The pumping arrangement was generally attended to by an engineer or properly trained fireman. He did not think the pumping entailed extra work. The burners should be so designed as to permit of rapid and easy examination, overhauling, and renewal of special parts by inexperienced men. An ordinary fireman should be able to rake out a burner and renew it. In regard to cleaning of tanks, Mr. Hume said the filling pipe was drained out and the valves opened. The tank was wiped dry before oil was put in. It was scraped down, and any coal was scraped out. No water should be left in at all. He had not found that the upkeep was any more, if as much, when burning oil as when coal was used for fuel. The flash point required by the classification societies was nothing less than 150° F. That was the minimum, and he thought it was a very safe one. The greater amount of oil used was residue, and mazoot was one name for it. It was a very thick black oil, which had to be heated in the bunker before the pump would draw it. With a well fitted up installation, the extra work on the engineers was not worth speaking of. He was pleased to see that Mr. Anderson thought duplicate filters were necessary. The type of pump did not matter much, whether it were a duplex or simplex. The whole of the installation should be of iron, because when copper pipes were used a chemical action was set up, which weakened the pipes and allowed a vapour to escape.

Votes of thanks to Mr. Hume for his paper, and to the Chairman for presiding, concluded the meeting.

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The "Cape of Good Hope Government Gazette" of 15th January contains a memorandum by the Public Works Department relating to a proposed rebate on the carriage over the Cape Government Railways of oil used as fuel for irrigation purposes.

THE EXPORTS OF AMERICAN PARAFFIN WAX.

COMPLETE FIGURES FOR 1906.

The exports of paraffin wax from the United States of America during December last were as follows (in pounds) : –

Exported to—	1906.	1905.
United Kingdom	11,399,652	9,943,482
Belgium	72,267	148,695
France	170,343	63,159
Germany	1,382,342	1,260,506
Italy	1,775,800	660,156
Netherlands	362,243	1,284,281
Other European Countries	308,765	525,064
Cent. America and British Honduras	47,198	55,600
Mexico	966,376	1,060,399
South America	91,074	31,909
Japan	—	818,431
British Australasia	325,302	—
Other Asia and Oceanica	218,092	46,331
British Africa	329,232	77,831
Other African Countries	177,964	—
Other Countries	3,165	6,737
Total	17,629,815	15,982,581

With the publication of these figures, we are enabled to give the figures for the exports during the past twelve months, as compared with those for the years 1905 and 1904. They were as under (in pounds) :—

EXPORTS FOR TWELVE MONTHS.

Exported to—	1906.	1905.	1904.
United Kingdom	98,307,477	97,965,883	100,133,662
Belgium	620,469	1,042,673	3,052,418
France	879,120	720,009	653,268
Germany	12,768,494	9,358,159	15,102,111
Italy	15,698,922	10,994,299	11,222,208
Netherlands	6,655,066	8,201,386	7,807,012
Other European Countries	5,909,306	6,178,398	5,980,752
Cent. America and Brit. Honduras	1,045,362	795,485	507,931
Mexico	10,111,741	7,431,469	8,778,801
South America	660,070	468,041	453,814
Japan	9,904,558	9,754,347	13,618,753
British Australasia	5,082,524	2,833,917	1,935,851
Other Asia and Oceanica	2,054,749	2,781,181	3,025,424
British Africa	1,729,864	2,144,062	2,089,545
Other African Countries	20,004,753	94,095	—
Other Countries	71,839	72,478	220,423
Totals	173,504,314	160,835,882	174,581,973

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A REMARKABLE OIL FIND IN GERMANY.

Professor Precht communicated to a meeting of the Chemical Society at Halle the following particulars concerning the finding of a petroleum oil on the Desdemona salt mine at Alfeld, on the Leine field in Germany. The oil was found in small quantity at a depth of 670 metres. It is of a light yellow colour, and has a specific gravity of 0·789. At 10° C (above Zero) it becomes thick, and begins to separate out paraffin scale. By distillation the following fractions were obtained :—

	Per cent.	Spec. Grav.
55 to 100° C.	3·6	0·675
100 to 150° C.	13·8	0·726
150 to 200° C.	15·8	0·759
200 to 250° C.	11·6	0·783
250 to 300° C.	13·7	0·802
Residue above 300° C.	41·3	0·830

. . . OPENING OF THE . . .

TURPENE COMPANY'S WORKS AT WANDSWORTH.

Wednesday was a red letter day in the history of Turpene, Ltd. It witnessed the opening of the company's new refinery, which occupies a most commanding situation on the Thames, on the Surrey side of the river, midway between the Wandsworth and Putney bridges.

During the past few months, the work of the erection of the refinery and other necessary buildings has been proceeding as rapidly as possible, and though on Wednesday the finishing touches had yet to be made, the work was so far completed as to permit of the opening ceremony taking place under the most favourable auspices.

Prior to the declaration of the opening of the works for the manufacture of turpentine (to be carried out in accordance with a special process discovered by Dr. Paul Dvorkovitz), an influential company of invited guests made a thorough inspection of the premises, the various interesting technical appliances which have been brought into use being explained by Dr. Dvorkovitz, and the surprise expressed at the various improvements that have been introduced, was general.

After a thorough tour had been made of the works, a brief ceremony took place in the main building, where Dr. Dvorkovitz declared the works open, expressing the hope that the venture would be (as he had reason to believe it would be) an unqualified success. The health of the directors of the company was then honoured, and the party adjourned to another portion of the premises, where the photographs here reproduced were taken. The gentlemen in the first illustration, reading from left to right, are Mr. G. W. Askew (secretary of Turpene, Ltd.), Mr. M. W. Ash, Dr. Paul Dvorkovitz, Mr. G. M. Light, Mr. J. B. McClurg (directors of Turpene, Ltd.), and Mr. James Allsop (works engineer). The large illustration shews the company assembled, together with a number of the workmen, at the rear of the stills.

The trade in turpentines is one of the most important branches of the varnish and kindred industries, and is well illustrated by the fact that not less than 6,000,000 gallons of petroleum oils are annually used in this country for this purpose.

LATEST QUOTATIONS OF PETROLEUM SHARES.

ENGLISH COMPANIES.

This list is restricted to companies who have paid dividends or who are producers.

Company	Capital Paid Up.	Value of Shares.	Latest Prices.
Assam Oil	£205,000	£1	$\frac{5}{8}$-$\frac{11}{16}$
Baku Russian Petroleum ..	£750,000 Ord.	£1	2/6-3/0
,, ,, ..	£650,000 $5\frac{1}{2}$% Pref.	£1	5/0-5/6
Bibi-Eybat Petroleum Co. ..			8/6-9/6
Californian Oilfields	£250,000 Ord.	£1	$5\frac{7}{8}$-$6\frac{1}{8}$
Commonwealth Oil Co. Pref	10/- paid up(Prem.)		$\frac{9}{16}$-$\frac{11}{16}$
,, ,, Def..	£1 fully paid		$2\frac{7}{8}$-3
European Petroleum.. ..	£550,000 Pref.	£1	2/0-3/0
,, ,, ...	£550,000 Ord.	£1	0/6-1/6
,, ,, ...	£376,000 Deb.	£100	82-85
Russian Pet. & Liquid Fuel ..	£500,000 $6\frac{1}{2}$% Pref	£1	9/6 10/6
,, ,, .. .	£600,000 Ord.	£1	7/3 8/3
Schibaieff Petroleum .	£575,000 6% Pref	£5	2-$2\frac{1}{4}$
,, ,, ...	£575,000 Ord.	£1	4/0-5/0
Shell Transport & Trading .	£2,000,000	£1	$1\frac{15}{16}$-$2\frac{7}{16}$
,, ,, ,, ..	£1,000,000 Pref.	£10	$9\frac{3}{4}$-10
Spies Petroleum Company ..	£312,500	10s.	10/6-11/6

RUSSIAN COMPANIES.

Company	Nom. Value in Roubles.	Quotations on Febuary 25th. Lowest Roubles.	Quotations on Febuary 25th. Highest Roubles.
Baku Naphtha Co.	100	548	552
Balakhany Naphtha Co.	250	—	—
Caspian Society	1,000	4,350	4,400
Melikoff, A. C.	250	—	—
Mirzoeff Bros.	250	—	—
Naphtha Co. "Kavkas"	250	—	—
Naphtha Trading Co., A. I. Mantacheff & Co.	250	155	157
Neft Co.	250	—	—
Nobel Bros.	5,000	9,750	9,850
,, ,, ...	250	—	—
Rops and Co. V...	250	—	—
Russian Naphtha Co.	250	—	—
Society Mazout	250	—	—
Tumaieff & Co., J. G.	250	—	—
Volga-Caspian Naphtha and Trading Co.	250	—	—
,, ,, ,, (Second Issue)	250	—	—

SCOTCH COMPANIES.

Supplied by Messrs. MACLEAN AND HENDERSON, STIRLING.

Company.	Capital Paid Up.	Value of Share.	Latest Prices.
Broxburn Oil Co.,Ltd.,Ord. 17/- pd	£235,000	£1	45s.
Do. 6% Cum. Pref. ..	£100,000	£10	$12\frac{7}{16}$
Burmah Oil, Ord.	£1,100,000	£1	64s. 9d.
Do. Pref.	£250 000	£1	21s. 6d
Dalmeny Oil Co., Ord. (7 paid) ..	£37,800	£8 10s.	£6 16s. 6d.
Do. 5% Pref. ..	£18,900	£7	93s.
Oakbank Oil Co., Ltd., Ord. (17s. pd. 1st issue)	£38,250	£1	42s.
Do. (17s. pd. 2nd issue)	£131,750	£1	41s.
Pumpherston Min.Oil Co.,Ld.,Ord. (17s. paid)	£110,500	17s.	$6\frac{11}{16}$
Do. 6% Cum. Pref.	£100,000	£10	$12\frac{5}{8}$
Tarbrax Oil Co., Ltd. Ord. (£1 pd.)	£38,350	£1	37s.
Young's Paraffin Co., Ltd., Ord. ..	£452,808	£4	77s.
Do. "B" Deb...	£150,000	£100	$177\frac{1}{2}$

DUTCH COMPANIES.

Company.	Latest Quotations	Former Quotations	Florins.
Arnhemsche Petroleum Mij. ..	—	—	1,000
Aurora ,, ,, (Deb.5%)	$93\frac{3}{4}$	$93\frac{3}{4}$	—
Campina Poiana Mij...	—	19	—
Dordtsche Petroleum Mij. (Pref.) ..	129	129	50
,, ,, ,, (Deb.$4\frac{1}{2}$%)	$102\frac{1}{2}$	$102\frac{1}{2}$	1,000
Gaboes ,, ,, ...	—	—	—
Holl. Rumeensche Petroleum Mij...	34	35	1,000
Int. Rum. Pet. Mij.	$105\frac{3}{4}$	$103\frac{1}{2}$	500
Java Petroleum Mij. (Ord.) . ..	—	—	1,000
,, ,, ,, (Pref.) ..	13	—	—
Koninklyke Nederl. Pet. Mij. Shares	743	722	250-1,000
,, ,, Share certificates	742	721	1,000
Mœara Enim Petroleum Mij. ..	136	$133\frac{7}{8}$	100
,, ,, 1-1,000 Oblig. 5	$101\frac{11}{16}$	$101\frac{1}{2}$	250-1,000
"Moesi Ilir" Petroleum Mij. ..	—	43	—
Nederl.-Rumeensche Petroleum Mij.	15	16	—
Nieuwe Ned. Petroleum Mij. And...	—	—	1,000
Oliebronnen in Hannover Mij. ..	$147\frac{1}{2}$	$147\frac{1}{2}$	—
,, ,, (Deb. 5 %)	96	96	—
Panolan Maatschappij Cert. ..	327	366	—
Perlak Petrol. Mij.(6% cum.pr.A.) ..	160	156	1,000
,, ,, (Common) ..	$138\frac{1}{2}$	$135\frac{1}{4}$	—
Sumatra-Palembang Petroleum Mij	$88\frac{1}{4}$	$90\frac{3}{4}$	500
Zuid Perlak Petrol. Mij. (Pref.) ..	$122\frac{15}{16}$	$122\frac{1}{4}$	—

THE THIRD
International Petroleum Congress

This Congress will take place at Bucarest during the first half of September next under the Patronage of His Royal Highness, Prince Ferdinand, Heir to the Throne of Roumania.

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Saturday, March 2nd, 1907.

THE "WOBBLERS."

Formed during the period when the Russian petroleum industry boomed in the eyes of the English investor, the Schibaieff Petroleum Co. has gone the way of many others of its class pushed upon the public at a similar period. At the time when the Russian Petroleum and Liquid Co., the Baku Russian Petroleum Co., the Schibaieff Petroleum Co., the European Petroleum Co. and numerous other concerns were floated, we predicted that in a very short space of time they would all find a very pronounced dearth of finances, for in those days the company promoter paid very little regard indeed to the necessity of leaving anything like a decent sum of working capital upon which the company might draw in order that it might carry on its work successfully and with profit to the investors. During that Russian oil boom, a sum of about £2,300,000 was paid for the acquisition of certain properties in the Baku fields, and when the various concerns were floated, they in turn took over the properties acquired at a sum between £5,000,000 and £6,000,000—quite a substantial margin being left for the pockets of the promoters. Yet the whole of these companies had not between them more than £400,000 of working capital, and so it was clear to everyone with "half an eye" that the mistake would be very quickly found out.

The Review has all along the line advocated that one of the first essentials for a public company is to have a working capital at least sufficient under ordinary conditions, and when at the beginning of 1900 we found that the Schibaieff Petroleum Co. was applying for £400,000 fresh capital for the purpose of acquiring additional petroliferous land, we wondered where the money would be found to develop it, especially seeing that of the 160 acres they had originally purchased, only about 25 acres had been exploited, and even that to a very limited extent. We at that time adversely criticised the proposal, and the justice for this was shortly afterwards seen, for by the end of November, 1902, when one might have expected that the infusion of this additional financial assistance would have brought some tangible result, the position of the ordinary shareholders was brought down to the worst possible—in which unenviable position they still remain. In that year the preference shareholders received their 6 per cent., and the magnificent sum of £78 12s. was carried forward.

In the brief space which we can afford to devote to this company's affairs, we may lay emphasis upon a number of points which have undoubtedly led to placing the company in the present position it occupies.

No sooner was the company formed, and the subscriptions received from the investing public upon the strength of a prospectus which laid special stress upon the fact that the company had a unique organisation for distributing their products all over Russia as well as refineries which stood second to none in Russia, than (and in less than 18 months) they entered into an arrangement with the Mazout Co. for the distribution of their products. From the very first, we were satisfied that that was a serious mistake to make, and in a short time, our remarks were corroborated by the present Chairman of the company, Mr. Cater Scott, for he announced to the shareholders that the arrangement had been unfavourable to them in every way. They had lost money through it (he said) and if they had continued, they would have been in a very serious position and have irretrievably damaged their distributing business in Russia.

The directors saw the blunder they had made, and so the agreement was quickly terminated, the company being practically left without representation throughout Russia, for their own and experienced managers had left when the Mazout Co. had been brought in.

The board of the Schibaieff Company then turned its attention to purchasing a tank fleet, barges, tugs, etc., etc., for the carrying of oil up the Volga, the carrying capacity of their new vessels being 18,000,000 poods. Then tank storage was erected at Tzaritzin and other centres, and an enormous amount of money was spent in this direction, a considerable part of the company's assets having to be mortgaged for this purpose as can be seen from the most recent balance sheet.

But even this policy was very disastrous, and, as was explained to the shareholders on Thursday at the ordinary general meeting, that part of the business has been liquidated, and another arrangement has been made with the Mazout Co. and its associates for the purpose of taking over the distributive business. It is not for us to criticise the new arrangement, which has already had a run of many months, but, knowing as we do something of the nature of the basis of working, we are surprised to find that it is viewed by the directors of the Schibaieff Co. as one which is "distinctly advantageous." If our memory serves us correctly, we believe the old arrangement was first believed to be equally advantageous: it was only when the gilt of newness had worn off that the directors saw the disaster which was inevitable.

These constant changes of policy can in no case be beneficial to the interests of the shareholders, and we certainly do regret to find that when the worthy gentlemen of the Schibaieff Company, knowing little or nothing of the intricacies of the Russian petroleum business, took in hand the reins of the company, they did not, first of all, lay down a set policy to which, come what may, they would rigidly adhere. It is the absence of this settled policy that has done so much harm in the past, and is, we fear, bound to do harm in the future. The remarks of the chairman as to the absolute necessity of a distributing company operating in Russia having almost unlimited funds at its disposal. are, of course, very true as far as they go, but it seems to us rather late in the day that this most essential feature of the distributing business should be recognised only after the experiment has been tried and failed.

The report, which we now have before us of the 17 months' working of the company, bears evidence of the damage which this absence of policy has brought in its train. On one side we see a few of the mill-stones which to-day hang about the neck of the Schibaieff Co. First you have the 4½ per cent. debentures equalling £264,000, and then there is something like £700,000 owing to foreign bankers and sundry creditors, and so far as we can see, the debtors, together with the stocks of oils and materials in store, only total to £600,000, thus leaving even there a balance considerably on the wrong side. But, in addition, we note that no amount has been placed towards depreciation of wells, etc., during the seventeen months covered by the balance sheet, and this in itself looks a very ugly omission. The balance sheet is happily drawn in such a manner that it is scarcely possible to form an accurate idea of the way in which the business is being conducted. Of course we know it will be argued that it is impossible to get all details into the confined space of a balance sheet, but we do think that some explanation should have been coming from the chairman as to the working of the refineries, and the cost of the treatment of oil there. This is no secret generally, but it forms details which the directors have always shewn no desire to give. The reason is very obvious. During the period under review, the prices for crude oil have been extremely high in Baku, and, though the production of the Schibaieff Co. has been considerably reduced, it does not require much calculation to see that the margin of profit should have been considerably greater than during a period like that of 1902 when low prices were prevailing, but when the production was greater, the difference in high prices represents profit without any reduction for the cost of crude production. The report of the general manager which was sent along with the directors' report, always makes a strong point of giving the total production of the Baku fields from year to year, rather than publishing the monthly production of his company with the out-turn of the refineries — information which would certainly be of more direct interest to the shareholder. Details in this respect might, however, not prove very pleasant reading. In regard to the arrangement with the Mazout Co. and its associates we would ask the directors one question, and this is: is it not a fact then that the company has had to purchase its crude oil, or some part of it, in the open market and pay the very heavy figures which it now commands in Baku in order to carry out such arrangement?

We do not want to be too hard on the Schibaieff directors, for we will give them the credit for honesty of purpose, and of sparing no effort to endeavour to bring about a period when dividends shall be paid to the shareholders, but we would strongly urge them to lay down a policy once for all, and having laid it down, then to follow it, turning neither to the right nor to the left. It is in the absence of policy that failure oft meets the business man, and the same thing applies, only with doubled force, to companies whose interests are bound up with the Russian petroleum industry.

◆

The Panama Pipe Line.—During the latter half of January, the first tank steamer filled with Californian oil for the Union Oil Co. arrived at Panama. Storage facilities have now been completed at both ends of the line, and as soon as a sufficient quantity of crude oil is on hand, its movement across the Isthmus will be commenced.

THE SCHIBAIEFF PETROLEUM COMPANY, LIMITED.

ANNUAL MEETING.

The ordinary general meeting of the Schibaieff Petroleum Co., Ltd., was held at Winchester House, Old Broad Street, E.C., on Thursday afternoon, the chairman of the company—Mr. C. J Cater Scott—presiding.

Mr. A. W. TURNER, the secretary of the company, read the notice convening the meeting and also the report of the auditors, after which the report of the directors was taken as read. It was as under :—

The directors submit the accounts of the company for the period of 17 months from 14th November (1st November o.s.), 1904, to 13th April (31st March o s.), 1906, the extended period being due to the circumstance that the company ceased to do its own distributing business in Russia as from 1st/14th April, 1905, and arranged to work the same through the agency of Messrs. Nobel Bros. and the Mazout Co.

The directors regret to report that the accounts of the Russian company, S. M. Schibaieff and Co., shew a debit balance of £22,862 14s. 6d., against which there is a balance of undivided profits in the English company of £63,067 13s. 1d.

Various causes have contributed to bring about this result to the Russian company. As the shareholders are aware, serious political and labour disturbances and prolonged strikes have taken place in Russia and the Caucasus during the period covered by the accounts. The company's oil fields were absolutely idle and unproductive for 18 weeks out of the 74 weeks under review, and after the resumption of work on the termination of the strike, there was necessarily much further loss of time, and heavy unremunerative expenses before the production of the oil wells could be brought back to its former figure. In connection with the political disturbances extensive incendiary fires took place on the oil fields during August and September, 1905, destroying property of the company valued at £45,000: this loss was not recoverable from the insurance companies, the policies only covering ordinary risks. The Russian Government has undertaken to advance a sum of money by way of loan to the sufferers by these fires, but up to the present only about 25 per cent. of the company's proportion has been received, owing to legal difficulties in complying with the Government conditions.

Notwithstanding all these difficulties, the producing and refining departments taken by themselves have made substantial, though reduced, profits; these have been more than absorbed by the heavy expenditure in the distributing branch of the business prior to 1st/14th April, 1905, and by the condition of the money market in Russia.

The transfer of the distributing business to Messrs. Nobel Bros. and the Mazout Co. involved the realisation at a loss of certain property and surplus stocks of material; this has been charged to reserve account.

During the last twelve months of the period now dealt with, the contract with Messrs. Nobel Bros. and the Mazout Co. for the concentration of the distributing business in the interior of Russia has been in force, but, owing to the general state of the country, all the advantages expected have not been realised.

The London accounts shew :—

				£	s.	d.
Balance brought forward from last account				58,004	9	9
Add—						
Dividend on S.A.I.C. shares to December, 1905	£10,029	9	11			
Interest on deposits..	21	11	6			
Transfer fees..	79	4	6			
				10,130	5	11
				68,134	15	8
Deduct—						
Income-tax	5,031	3	9			
Depreciation of furniture	35	18	10			
				5,067	2	7
				£63,067	13	1

Your directors regret to state that, in consequence of the attempt on his life and subsequent frequent threats, Mr. Leslie Urquhart, the late general manager, has found it impossible to return to Baku, and has therefore resigned his position. He retains his seat on the board of S. M. Schibaieff and Co. in association with Messrs. Deroujinsky, Sacker and Lippmann, the directors in Moscow.

In moving the adoption of the above report together with the balance-sheet, the CHAIRMAN said he desired to explain how it came about that there had been such an unusual delay in calling the shareholders together. If they looked at the report and accounts they would see that they were for 17 months. The additional five months was due to their having made arrangements with Messrs. Nobel and the Mazout Co. to undertake the distributing portion of their business in Russia. Then, again, much has happened in Russia both politically, commercially and financially since they last met, and that had caused a very general dislocation of trade, which nowhere had been more general than in the oil trade. As a consequence of that, they did not receive from their selling agents the accounts until late in the autumn instead of in the summer. They had therefore held their meeting at the very earliest possible time. Well, during the seventeen months with which the accounts dealt, they had had incessant political and racial strife in the Caucasus, and that had been most prejudicial—he might say most disastrous—to the oil trade of Baku. He was quite right in calling that strife racial and political, for although the effect in their business had been seen in labour strikes and fires, the root of it all was undoubtedly political, and if that political and racial element could have been eliminated, then there would not have been any troubles to speak of between employers and employed in Baku And those disturbances occurred at a most unfortunate time. In accordance with the arrangements they had made for altering the character of their distributing business in Russia, they had to liquidate their own portion of the business before it was transferred, and the liquidation of any such business was necessarily a most expensive matter.

Turning to the profit and loss account of S. M. Schibaieff and Co., in consequence of the alteration in carrying on their distributing business, there were certain very considerable changes which made comparison exceedingly difficult. With reference to trade expenses, he thought they could take it that in future these would not exceed £18,000 per annum—he hoped considerably less, but the reduction in that direction represented one of the benefits by transferring their distributing business to Messrs. Nobel and Mazout. The item discounts and commissions they would see for the 17 months amounted to £85,758, which for the twelve months would work out at £68,000, as against £47,000 the previous year. The difference of that £17,000 was entirely due to much higher rates upon money in Russia, which had risen from 7 per cent. to 9, and in some cases 10. The £7,000 odd which had been written off as bad and doubtful debts had been necessary at the closing of their distributing business. After dealing with other items in the balance sheet, the speaker then came to the effect which the strikes had had upon the company's operations during the period under review, and he thought he had full justification for saying that those strikes had effected their balance sheet by an amount of not less than £200,000. During the period under review, the total expenses on the oil fields had been £131,000. Some might argue that that amount was excessive; but he could only say that the essence of their business was the production of oil, and so it was their duty to do all they could to increase their production. Owing to the constant interruptions, the work in sinking new wells had been much more expensive because when the work was stopped, they found that a deal of it had to be done over again.

With reference to the distributive business, there was no doubt it was a great advance to be thus interested, but it was a very expensive business. They had to carry enormous stocks, and it meant that a very large capital was required, but further they had to have agents and depôts throughout the country, and so under such circumstances, he was convinced that to carry on such a business upon a small or even a moderate scale could not be profitably done. They recognised that it could only be made to be profitable if it were carried out on a gigantic scale. They did not, in the first place, have the necessary oil production, nor did they have the necessary capital at their disposal. It was that knowledge which led them to make the arrangements with Messrs. Nobel and Mazout they had done, and he was happy to say that, although the year in which the arrangements had been at work had not been a favourable year for them, still, on the whole, the contract had been distinctly advantageous to them.

The refining part of their business was of course a great advantage. They had got an extremely good refinery second to none in Baku, and they were able to do a large amount of work for other firms, for which they made a certain amount of profit, besides which they had the great advantage by running their distillery at full time. But after all, oil production must be the backbone of their business, and by that they would either make it a success or a failure, and he did not anticipate the latter. To make the company a success, they had to have continuous work, and if they were going to be constantly stopped by strikes, it was impossible to develop their oil production and carry it through on such a scale as would make the business profitable. He thought his hearers had no true idea of the nature of those strikes. Well, in the seventy-four weeks covered by the report, they had eighteen weeks of strikes, during which their oilfields were absolutely idle, and in addition much damage was done to property. In addition to the one-fourth of the whole time which they were idle, they had 14 other weeks when things were very little better, so that really during not far off one-half of the period covered by the balance-sheet, they were certainly not covering their working expenditure. Those repeated strikes were seriously threatening the whole position of the liquid fuel trade in Russia. The liquid fuel trade was of as much importance to Russia as was the coal trade to England. River navigation was dependent upon liquid fuel, and the factories and private houses likewise depended upon oil. He personally could not understand how the Russian Government who were interested in the oil industry by receiving royalties had allowed such a position to continue. The Russian Government had failed absolutely, but he believed they had really never made a serious attempt to deal with the troubles, while for a long time there was no government whatever in the oil fields.

He was pleased, however, to say that during the past five months the position had distinctly improved, and he was perfectly confident that if order were restored, they could all look to the future with every confidence. They did not want a restoration of order on the lines carried out in Moscow and St. Petersburg; all that was necessary was for the Government to shew that they were absolutely in earnest.

During the seventeen months dealt with in the report, their monthly production had been 588,000 poods, but since the middle of last September, they had had five months of uninterrupted working, and the result was that their average monthly production had gone up to 850,000 poods, while for the last month it was over 1,000,000 poods. On every pood of oil produced to-day there was a profit of about ten copecs at the very least, and so, if only the labour troubles would cease, then their company would be very prosperous. But he thought they had seen the worst of the troubles. Things were on the improve, and when they had got over the extremely difficult time through which they had been passing, then they would see how they could put their house in order. He thought that then it would be possible to put before the shareholders a scheme by which they could deal with that burden of unpaid dividend on the preference shares, and also at the same time arrange to relieve those bankers who had stood by them in the matter of credit during the time of all their trouble.

Mr. Cater Scott then concluded by speaking in the highest terms of praise of the devotion and loyalty of the staff at the oil fields, specially singling out Mr. Urquhart. They all knew the danger Mr. Urquhart had gone through, and they (the directors) thought they had no right to hold Mr. Urquhart to his contract, for it would be at the risk of his life. Mr. Urquhart, therefere, had tendered his resignation, but would remain with the company in Moscow. Then there was Mr. Offenheim, who had gone out to Baku when the strike was at its most. His services had been of the greatest possible value, and could not be spoken of in too high terms of praise. The speaker then moved the adoption of the report and accounts.

Mr. Von Offenheim seconded the motion, and in a very interesting speech he referred to the circumstances which led up to the present regrettable state of affairs in Baku and Russia generally. He said that a new Governor had been ruling at Baku since January 1, and had already shewn great energy and determination in dealing with the situation. It was to be hoped that order would be re-established within a few months, especially as the workmen really had no grievances, and were only terrorised into striking by the revolutionaries, who put into their mouths absurd demands. Meanwhile, some compensation for the troubles was being obtained by the high prices now ruling. All that the company asked for was a long spell of uninterrupted work, when good results would certainly be obtained.

The motion was carried unanimously.

The Chairman next moved the re-election of Mr. W. von Offenheim and Mr. H. van Kempen, the retiring directors, which was seconded by Mr. R. C. Antrobus, and agreed to unanimously.

Messrs. Deloitte, Plender, Griffiths and Co. were re-appointed auditors, on the motion of Mr. Simson, seconded by Mr. Crawley.

Mr. S. E. Bates proposed: "That the thanks of this meeting be given to Messrs. Urquhart, Wallis, Ferguson, Yelin, Schibaieff, and McDonell and the staff for their loyalty and devotion to the company, often at great personal risk, during the political and labour disturbances at Baku, extending over the last two years and a half."

Mr. C. F. Howell seconded the motion, which was unanimously adopted.

A vote of thanks to the chairman and directors concluded the proceedings.

PRODUCTION OF ENGLISH COMPANIES IN RUSSIA.

Baku Russian Petroleum Co., Ltd.—The production for the week ended 16th February was 203,000 poods, or 3 272 tons (the decrease is due to severe snowstorms and frost); and for the week ended 23rd February was 235,000 poods, or 3,804 tons.

Russian Petroleum and Liquid Fuel Co., Ltd.—The production for the week ended February 17th was 198,000 poods, or 3,192 tons; and for the week ended 24th February, 165,000 poods, or 2,660 tons.

Spies Petroleum Co., Ltd.—The output for the week ended 17th February was 109,725 poods, or 1,769 tons; and for the week ended 24th February, 113,800 poods, or 1,835 tons.

The European Petroleum Co., Ltd.—The production for the week ended 17th February was 129,812 poods, or 2,093 tons; and for the week ended 24th February was 130,628 poods, or 2,106 tons.

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The Roumanian Petroleum Industry during 1906.

MORE. . .
. DETAILS.

We are now in a position to give additional details concerning the Roumanian petroleum industry during the past year. The figures of the total production of crude oil at the various Roumanian oil fields, as published in the latest issue of the *Moniteur du Petrole Roumain*, are :—

Prahova District—	1906.	1905.	Increase in 1906 against 1905.
Bustenari	509,995	411,316	98,679
Campina-Poiana	102,148	94,860	7,288
Moreni	162,806	47,243	115,563
Baicoi	45,331	1,949	43,382
Tintea	11,094	7,412	3,682
Doftanet	4,302	—	4,302
Calinet	3,070	—	3,070
Apostolache ..	2,506	419	2,087
Other Fields in Prahova	4,937	5,010	(decr'se) – 33
Total in Prahova District ..	846,189	568,209	+277,980
Dambovitza District—			
Gura Ocnitza ..	13,369	17,294	–3,925
Colibasi	3,802	4,216	–414
Glodeni-Badislavoia	2,795	2,955	–160
Other fields ..	176	238	–62
Buzeu District—			
Sarata	11,542	12,254	–712
Other fields ..	138	650	–512
Bacau District—			
Various fields ..	9,080	8,974	+106
Total	887,091	614,790	+272,301

The total production of crude oil in 1905 increased against that of 1905 by 272,301 tons, or 45 per cent. As in former years the bulk of the production was obtained in the Prahova district, and more particularly in the four principal fields of Bustenari, Campina-Poiana, Moreni and Baicoi. The relative importance of these fields is shewn in the following figures of the proportionate contribution in per cent. of the various districts in the total production during the last two years :—

	1906. Per cent.		1905. Per cent.
Bustenari	57·5	..	66·9
Campina-Poiana	11·5	..	15·4
Moreni	18·3	..	7·7
Baicoi	5·1	..	0·3
Tinta	1·2	..	1·2
Other fields in Prahova	1·8	..	1·0
Dambovitza District	2·3	..	4·0
Buzeu District	1·3	..	2·1
Bacau District	1·0	..	1·4
	100·0		100·0

Against 1905 Bustenari during last year increased its production by 24 per cent., Campina had an increase by 7½ per cent., Moreni by 245 per cent., whilst in the case of Baicoi there can be no comparison at all with 1905, when it produced less than 2,000 tons. The production in the Dambovitza district declined by 19 per cent., whilst in the Buzeu and Bacau districts it remained practically unchanged.

The following was the number of boreholes and hand dug wells at the various Roumanian oil fields at the end of 1906, as compared with the end of 1905:—

	At the end of 1906.						At the end of 1905.					
	Boreholes.			Hand wells.			Boreholes.			Hand wells.		
	Producing.	In drilling.	Abandon'd.	Producing.	In sinking.	Abandon'd.	Producing.	In drilling.	Abandon'd.	Producing.	In sinking.	Abandon'd.
Bustenari	280	167	82	151	76	298	191	138	42	201	48	221
Campina Poiana ..	48	51	58	7	1	107	43	35	52	9	5	100
Moreni	13	7	8	—	—	13	6	26	9	—	—	18
Baicoi	6	17	5	3	1	8	5	1	3	4	—	10
Tintea	8	3	9	1	1	19	10	1	9	—	—	19
Other Prahova Fields	15	28	22	35	16	175	12	21	21	53	14	153
Total in Prahova ..	370	273	184	197	95	620	267	222	136	267	67	521
Dambovitza District	14	9	16	103	15	93	10	12	8	88	20	99
Buzeu District ..	8	4	11	71	15	36	8	2	10	69	23	28
Bacau District ..	41	23	41	322	27	390	46	7	42	241	24	134
Total	433	309	252	693	152	1,139	331	243	196	665	134	782

It will be observed that in 1906 there was a continuance of the tendency to gradually discard the old method of exploitation by hand dug wells, and to extend exploitation by borings. During the last few years simultaneously with the rapid growth in the number of boreholes, the hand dug wells in exploitation have been steadily decreasing. These hand wells, which work only the upper strata, when these strata become exhausted, are either abandoned or have boreholes started in them to exploit the deeper strata. Of the total number of hand wells still classed as productive barely one-third are producing regularly. The remainder are made up of the old wells at Sarata, Solonti, Moinesti, Lucacesti, Tetzcani, etc., in which the oil is collected only once a week, and the output of which is next to nothing.

The growth of crude oil production in Roumania during the last ten years is shewn in the following table :

	Tons.		Tons.
1897	110,000	1902	310,000
1898	180,000	1903	384,302
1899	250,000	1904	500,561
1900	250,000	1905	614,870
1901	270,000	1906	887,091

The production of the leading firms during the past year compared to 1905 was as under :—

	1906.	1905.
Steaua Romana	273,800	204,456
Bustenari Co.	132,822	94,668
Regatul Roman Co.	112,188	31,425
Sylva Co. (late Telega Co.)	55,382	45,602
Romano-American Co.	46,999	11,673
International Co.	42,116	51,050
Pleyte and Co. (late Moreni Syndicate)	37,875	10,206
Trajan Co.	22,474	28,126
Colombia Co.	23,369	7,586
Aquila Franco-Romana	13,481	6,081
Arnheemsche Petroleum Co. ..	12,289	20,706
Seceleanu Bros.	10,942	18,016
Grigorescu and Vladescu	9,444	9,494
Stanescu and Giuglescu	8,081	9,746
Olandeza-Romana Co.	8,105	5,101
Galo-Romana Co.	7,433	447
Grigorescu and Stroe	3,921	1,539
A. Van de Werk	3,737	5,181
Riske, Papescu and Ionescu.. ..	3,103	3,122
Ion Grigorescu..	3,267	4,192
P. A. Naumescu	2,554	401

Of other companies not included in the above, but whose fate may interest some of our readers, are the New Berca Petroleum Co., Ltd., which operates in Roumania under the firm of Prince and Johnston; they produced in 1906 38 tons against 602 tons in 1905. The Roumanian United Petroleum Co., Ltd., whose property at Baicoi is worked under the title of Ambrose Congreve, had, in 1906, a production of 658 tons against 1,002 tons in 1905. We learn that this last named property has, last August, been transferred to Messrs. Pleyte and Co., acting on behalf of the Royal Dutch Co. group.

In examining the operations of the Steaua Romana in 1906, as shewn in the statistics, we see that its total production was divided among the different fields as follows:—Bustenari and Doftanet, 139,778 tons (against 110,200 tons in 1905); Campina, 82,426 tons (77,515); Baicoi, 36,125 tons (90); Sarata, 11,542 (12,254); Moinesti-Solonti, 3,776 tons (4,597). The number of productive boreholes which the Steaua Romana possessed at the end of 1906, was:—at Bustenari and Doftanet, 88 (against 71 at the end of 1905); at Campina, 42 (35); Baicoi, 3 (2); Sarata, 1 (1); Moinesti, 31 (39); total, 165 boreholes against 148 at the end of 1905. The great activity displayed by the Steaua Romana in developing its properties is shewn in the number of wells it is drilling, which, at the end of 1905, was:—at Bustenari, 73; Doftanet, 16; Campina, 41; Baicoi, 7; Sarata, 1; Policiori, 3; Moinesti, 3; total, 144 boreholes. The number of abandoned boreholes at the end of 1906 was:—Bustenari, 11; Doftanet, 5; Campina, 41; Baicoi, 4; Sarata, 3; Policiori, 1; Moinesti, 36; total 101 abandoned boreholes.

The total production of the Regatul Romano Co. is divided between the following fields:—Campina, 9,018 tons (against 4,730 tons in 1905); Moreni, 95,387 tons (28,148); Baicoi, 7,783 tons (none in 1905). The number of producing boreholes at the end of 1906, was:—Campina, none; Moreni, 8; and Baicoi, 3; total, 11 boreholes. The number of wells in drilling, was:—Campina, 8; Moreni, 2: and Baicoi, 6; total, 16 wells. The number of abandoned wells, was:—Campina, 11; Moreni, 4; total, 15 wells.

The Bustenari Co. operates only at Bustenari, where at the end of 1906 it had 54 boreholes, producing 25 in drilling and 6 abandoned, against 30 producing, 21 in drilling and 4 abandoned at the end of 1905. At the end of 1906 this company was still exploiting 39 hand wells (against 69 at the end of 1905); they also had 19 hand wells in sinking and 71 abandoned ones.

The Sylva (late Telega) Co. likewise operate at Bustenari only, where it owns 41 productive boreholes, 16 in drilling and 25 abandoned borings.

The Romano-American Co.'s production was distributed between the different properties as under:—Bustenari, 16,882 tons (2,682 tons in 1905); Moreni, 29,544 tons (8,889). At the end of 1905 they had at Bustenari 9 boreholes producing, 4 in drilling and 18 abandoned, and also 16 producing hand wells. At Moreni they had 2 boreholes producing, 3 in drilling and 2 abandoned. At Pacureti: 1 producing borehole, 1 in drilling and 2 abandoned; also 1 producing and 16 abandoned hand wells. At Tetzcani: 1 producing borehole, 10 in drilling and 3 abandoned; also 42 producing hand wells and 30 abandoned ones.

The International Co. produced at Bustenari 31,473 tons (35,335 tons in 1905), and at Gura-Ocnitza 10,643 tons against 15,715 tons in 1905. The number of boreholes at the end of 1906 was: at Bustenari, 12 producing, 8 in drilling, and 2 abandoned; at Gura-Ocnitza, 7 producing, 4 in drilling, and 4 abandoned. They also had 16 producive hand wells at Bustenari and 22 at Gura-Ocnitza.

THE OPERATIONS OF REFINERIES.

The operations of the varions refineries in 1906, compared to the preceding two years, are shewn in the following figures (in tons):—

	1906.	1905.	1904.
Total production of crude oil ..	887,091	614,870	500,561
Crude oil treated at the refineries	748,798	510,143	391,387
Output of products—			
Benzine	114,428	78,182	62,210
Illuminating oil	221,683	153,499	109,510
Lubricating mineral oils ..	53,588	17,255	30,214
Residuals	333,714	237,677	173,661

The quantity of crude oil submitted to refining during the past year represent 84·3 per cent. of the crude oil production against 83·1 per cent. in 1905, and 78·2 per cent. in 1904. The proportionate output of various products from crude oil treated in 1906, was:—benzine, 15·3 per cent.; illuminating oils, 29·6 per cent.; residuals, 44·5 per cent.; other products and loss, 10·6 per cent. In 1905 the output was:—benzine, 15·3 per cent.; illuminating oil, 30·1 per cent.; residuals, 46·6 per cent.; other products and loss, 8·0 per cent.

The following were the quantities of various petroleum products delivered from the Roumanian refineries for home consumption during 1906, compared to 1905 (in tons):—

	1906.	1905.
Benzine	566	615
Illuminating Oil	35,243	31,558
Residuals	237,477	162,243
Other oils	5,350	4,921

The consumption of illuminating oil has in 1906 increased by 3,685 tons, or 11 per cent. against 1905, which has occurred chiefly in the rural districts. The consumption of residuals increased by 75,234 tons, or 46·8 per cent. This latter fact is of the greatest importance for the Roumanian petroleum industry. It shews that Roumanian manufacturers and other consumers of fuel on a large scale are recognising the advantages of liquid fuel, the use of which is spreading rapidly throughout the country. There are still a large number of industrial establishments in Roumania which burn coal or wood, and in view of the high prices of these fuels now ruling in Roumania, the current year will probably witness another large increase in the consumption of liquid fuel.

The stocks of various products at the end of the year were:—

	At end of 1906.		At end of 1905.
Benzine	18,275	....	20,084
Illuminating oil	48,967	....	30,144
Other oils	67,334	....	64,452

◆

Directorate Changes.—Mr. H. S. Ashton, one of the directors of the Burmah Oil Co., has recently joined the directorate of the Assam Oil Co., Ltd., while Mr. T. B. Bowring, one of the members of the board of that company has joined the Burmah Co.'s board.

MISCELLANEA.

IMPORTANT DEVELOPMENTS IN SCOTCH OIL TRADE.

An important development has taken place in connection with the Tarbrax and Pumpherston Oil Companies. These companies have added to their extensive shale fields a large tract of coal bearing lands. The properties secured on lease are the estates of Woodfords, Eastermosshat, Viewfield, Woolfordyke, etc., extending to about 1,700 acres, and situated on the borders of Lanarkshire and Midlothian, and adjoining the lands occupied by the Tarbrax Oil Co., where they already obtain their shale supply. The coal has already been proved in good position, and is free from faults, and found in a seam four feet in thickness. It can be cheaply worked, and is of a good commercial quality. This addition to the companies' resources is of very considerable importance at the present time, in consequence of the high prices of coal, and great economy will result to the oil works owned and controlled by these companies at Tarbrax, Pumpherston, Seafield and Deane. It is understood that operations will be begun at once, and that no additional capital will be necessary, The oil works at Tarbrax are dealing with an output of 650 tons of shale per day in three benches of retorts, the last bench having been started a few weeks ago.

NEW ZEALAND PETROLEUM.

Satisfactory progress is reported as being made with the development of the New Zealand petroleum industry. The New Zealand Minister of Customs was recently asked to make a reduction in the duty on petroleum-boring machinery, and he has promised to fully consider the application. A representative of Sydney capitalists has completed negotiations for a lease of properties adjoining New Plymouth, on the Carrington Road, and at Inglewood, for oil-boring purposes. On the principals confirming his action, boring plant will be at once secured, and work will be started on the New Plymouth property, which is only half-a-mile from the Birthday Well at Moturoa.

THE TEXAS AND LOUISIANA FIELDS DURING JANUARY.

The year 1907 has started very satisfactory for the Texas and Louisiana oil fields, for what has now become to be looked upon as a usual monthly shortage was reduced during January. For during the month, not only did production shew some increase, but rail and port shipments were decreased. In this way, the gap between production and consumption was materially lessened. For the last month in the year the shortage was roughly 1,200,000 barrels, but during January this was reduced to 865,000 barrels, or nearly 30 per cent. The gross output of all the districts in south-east Texas and Louisiana was estimated at 44,180 barrels per day at the end of January, being an increase of about 500 barrels per day as against the production at the beginning of the month. This figure in itself is not very large, but it signifies the ending of the decrease and the commencement of a slight increase in production. The Jennings field in Louisiana experienced a declining production during the month, but on the other hand, all the south-east districts, with the exception of Saratoga and Batson shewed an increase. The total output of the Texas-Louisiana fields during January was estimated at 1,300,000 barrels, shewing a daily average of 42,219 barrels during January, as against 40,924 barrels in December.

In field operations much activity was noticeable in January, and in Texas and Louisiana 95 wells were completed, of which 61 were producers, this being an increase of 40 completions and 22 producing wells during January as against December. One feature of recent developments in Louisiana is the beginning of systematic developement of the Caddo oil field.

BAKU PRODUCTION IN JANUARY.

The production of crude oil at the Baku oil fields in January amounted to 36,909,897 poods, including 2,141,000 poods obtained from spouters.

The production of the leading firms was as under :—

	January. Poods.	December. Poods.
Nobel Bros.	5,400,000	5,700,000
Caspian and Black Sea Society ..	3,100,000	3,200,000
Pitoeff and Co.	2,800,000	2,100,000
Caspian Society	2,300,000	2,600,000
Baku Naphtha Co.	2,000,000	2,300,000
Mantacheff and Co.	1,200,000	2,400,000
Russian Naphtha Co.	1,200,000	1,000,000
Zoubaloff	1,100,000	1,300,000
Schibaieff Petroleum Co., Ltd. ..	1,100,000	1,200,000
Baku Russian Petroleum Co., Ltd. ..	1,000,000	1,200,000
Aramazd Co.	900,000	1,400,000
Naftalan Co.	900,000	1,000,000
Bibi-Eybat Petroleum Co., Ltd ..	800,000	900,000
Russian Petroleum and Liq. Fuel Co., Ltd.	700,000	900,000
Nagieff	700,000	800,000
Neft Co.	700,000	700,000
Moscow-Caucasian Co.	600,000	2,000,000
European Petroleum Co., Ltd. ..	600,000	700,000
Mirzoeff Bros. & Co.	500,000	1,400,000
Kalantaroff Co.	500,000	—

THE PIPE LINE TO THE GULF OF MEXICO.

OPERATIONS COMMENCED.

Latest information with respect to the new trunk lines from the Mid-Continent fields to the Gulf of Mexico, is to the effect that the operations connected with getting the pipe upon the ground have now been commenced in real earnest. The Texas Co., whose line will go the 200 miles from the Glenn Pool to the Red River, has already fixed the contract, and it is understood that the work will be pushed forward as quickly as crews can lay it. The contractors for the Gulf Pipe Line Co.'s line began the stringing of the eight-inch pipe for the Territory line at the beginning of February, and now some hundreds of workmen are housed at different places through which the line is to pass.

THE PRODUCTION OF CRUDE OIL IN GALICIA.

DETAILS OF THE PAST YEAR'S OPERATIONS.

The following are the official figures of the production of crude oil at the Galician oil fields in the year 1906, as compared with 1905 (in tons):—

	1906.	1905.
West Galicia—		
Potok	16,325	22,479
Rogi	11,452	24,234
Rowne	1,535	1,609
Tarnawa-Wielopole-Zagorz	24,870	32,956
Krosno	34,267	43,560
Other West Galician fields	30,883	35,607
East Galicia—		
Boryslaw-Tustanowice	562,198	546,556
Schodnica	47,151	60,202
Urycz	17,930	20,347
Mraznica	1,610	3,646
Other East Galician fields	12,220	10,600
Total	760,441	801,796

The total production in 1906 shews a decrease against 1905 by 41,355 tons, or 5 per cent. Boryslaw-Tustanowice, the principal producing district, taken separately, shews an increase against 1905 by 15,642 tons, or 28·6 per cent. The increase has occurred in the newly-developed Tustanowice field, which has more than compensated the declining production of the older Boryslaw field. At all the other Galician oil fields there has been a more or less considerable decline. Thus Schodnica has reduced its output by 13,000 tons, or 21 per cent.; Krosno, by 9,200 tons, or 21 per cent.; Tarnawa-Wielopole-Zagorz, by 8,000 tons, or 24 per cent.; Potok, by 6,000 tons, or 26 per cent.; and Rogi, by 12,780 tons, or 52 per cent.

The proportion contributed by the Boryslaw and Tustanowice district to the total production in 1906 amounted to 74 per cent. against 68 per cent. in 1905.

The deliveries of crude oil from the oil fields on the other hand shews a considerable increase against 1905, namely, 835,516 tons, against 636,365 tons. The difference between the production and deliveries represents the extent to which the stocks have been drawn upon. These stocks, which have been accumulating for several years and at the end of 1905 had reached the huge total of 511,900 tons, have during 1906 decreased to 399,543 tons, *i.e.*, by 112,378 tons, or 22 per cent. The stocks at Boryslaw-Tustanowice, taken separately, have declined from 401,218 tons to 345,602 tons, *i.e.*, by 13·8 per cent.

The deliveries of crude oil from Boryslaw-Tustanowice in 1906 were 593,615 tons, against 468,042 tons in 1905, an increase of 125,675 tons, or 27 per cent.

The quantity of crude oil used as fuel at the wells or lost in 1906 was 37,305 tons, against 23,374 tons in 1905.

The following figures shew the progress of the production of crude oil in Galicia during the last 12 years:

	Tons.		Tons.
1895	214,800	1901	452,200
1896	339,765	1902	576,000
1897	309,626	1903	713,330
1898	323,142	1904	827,116
1899	321,681	1905	801,796
1900	326,334	1906	760,441

◆

THE BRILLIG LIGHT AND ITS ECONOMY.

We have received the new catalogue issued by the Brillig Light Co., of Berwick-on-Tweed, concerning the lamps which are placed upon the market under the name of the Brillig light, and a most useful and interesting brochure it is. As may, perhaps, not be well known, the Brillig lamp is one which makes its own gas, and the brilliancy of the light is claimed to be second to none.

The Brillig lamp uses motor spirit as its fuel, and it is stated that in eighty candle power lamps, one quart lasts upwards of thirteen hours. The approximate cost therefore being one farthing per hour.

The principle of the light is the generation of the spirit which takes place by the application of a small spirit lamp.

The light is then turned on, and the gas continues to be generated, but in some of the lamps all that is necessary is the application of a match. The firm are also manufacturing incandescent lamps for street lighting, as well as several sizes of arc lights. The Brillig light has been adopted for some time now by the North-Eastern Railway Co. at a number of its country stations, and it is said to be working most satisfactory.

Telegraphic Address:—"OLEINE."
Telephone Nos.:—249 & 254 LIVERPOOL. 1990 MANCHESTER.

MEADE-KING, ROBINSON & Co.,

11, Old Hall Street, LIVERPOOL, & 18, Exchange Street, MANCHESTER,

IMPORTERS AND DISTRIBUTORS OF

PETROLEUM PRODUCTS THROUGHOUT NORTHERN AND MIDLAND DISTRICTS OF ENGLAND.

SPECIALITIES: All Grades of

GAS OILS, MINERAL LUBRICATING OILS, PARAFFIN SCALE AND WAX, PETROLEUM SPIRIT, BENZOLINE AND BENZINE, SWANSDOWN WATER WHITE AMERICAN PETROLEUM

TANK STEAMER CHARTERS DURING 1906.

MESSRS. HENRY FUNCK AND CO.'S CIRCULAR.

The annual list of Tank Steamer Charters made in the United Kingdom for the year 1906 has just been issued as usual by Messrs. Henry Funck and Co., of 101, Leadenhall Street, London, E.C. Owing to the length of the list, the Charters made during the last six months of the year have been held over until our next issue. The charters for the first half of the year were as under:—

	TONS CAP.	RATE PER TON.	PORTS OF SHIPMENT AND DESTINATION.	NUMBER OF VOYAGES.	CARGO.
JAN.	3800	12/-	United States (North Atlantic Ports)—Lisbon	1	Refined.
	5200	9/9 10/6	United States (North Atlantic Ports)—United Kingdom or Continent (Ostende, Bremerhafen) United States (North Atlantic Ports)—Hamburg	1	,,
	6100	9/9	,, ,, ,, United Kingdom	1	Refined, and/or Gas, and/or Lubricating Oil.
	6000	11/- 11/6 2 ports	United States (North Atlantic Ports)—Amsterdam or Rotterdam or Hamburg United States (North Atlantic Ports)—Amsterdam or Rotterdam or Hamburg	1	Refined.
	4900	17/- 1 port 17/6 2 ports 18/- 18/6 2 ports	Port Arthur (Texas)—United Kingdom or Continent (Ostende-Hamburg) Port Arthur (Texas)—Copenhagen Port Arthur (Texas)—United Kingdom or Continent including Copenhagen	1	Fuel Oil.
	3800	10/- 13/-	Kustendje—Cette ,, Rouen	2	Distillate.
	2800	18/-	Cuba (2 ports)—A direct United Kingdom or Continental Port	1	Molasses.
	5000	9/9 10/-	United States (North Atlantic Ports—United Kingdom or Continent (Ostende, Hamburg) United States (North Atlantic Ports)—Hamburg	1	Refined, and/or Gas, and/or Lubricating Oil.
	4300	10/6	,, ,, ,, United Kingdom or Continent (Ostende, Hamburg)	1	Refined.
	5000	10/- 10/6	United States (North Atlantic Ports—United Kingdom or Continent, excluding Hamburg United States (North Atlantic Ports)—Hamburg	1	Refined, and/or Gas Oil.
	3500	12/- 15/-	Kustendje—Cette ,, Rouen	1	Spirit.
	3500	12/- 12/6	United States (North Atlantic Ports)—United Kingdom or Continent, excluding Hamburg United States (North Atlantic Ports)—Hamburg	1	Refined.
	6000	9/9 10/-	,, ,, ,, United Kingdom or Continent, excluding Hamburg United States (North Atlantic Ports)—Hamburg	1	Refined, and/or Gas, and/or Lubricating Oil.
FEB.	5400	17/- 1 port 18/- 2 ports 18/- 18/9 2 ports	Port Arthur (Texas)—United Kingdom or Continent (Ostende, Hamburg) Port Arthur (Texas)—Copenhagen ,, ,, United Kingdom or Continent, including Copenhagen	1	Fuel Oil.
	5100	10/- 10/3	United States (North Atlantic Ports)—United Kingdom ,, ,, ,, Hamburg	1	Refined, and/or Gas, and/or Lubricating Oil.
	5200	9/9 10/-	,, ,, ,, United Kingdom or Continent, excluding Hamburg United States (North Atlantic Ports)—Hamburg	1	Refined, and/or Gas, and or Lubricating Oil.
	6100	10/6 2 ports	Batoum or Novorossisk—Manchester and Cardiff	1	Refined.
	5100	30/- 34/-	New York or Philadelphia—Bombay ,, ,, Calcutta	1	Refined and/or Batching Oil.
	6000	10/6 11/- 11/6 2 ports	Batoum or Novorossisk—Rotterdam ,, ,, Hamburg ,, ,, Rotterdam and Hamburg	1	Refined.
	4500	10/- 1 port 11/- 2 ports	,, ,, London or Manchester or Hull ,, ,, London and Hull	1	,,
MAR.	5000	12/6 1 port 13/6 2 ports	Philadelphia—Santander (Astillero) or Bilbao ,, ,, and Bilbao	1	Crude.
	3800	14/- 1 port 15/- 2 ports	,, ,, and/or Bilbao	1	,,
	3500	12/6 1 port 13/6 2 ports	Batoum—United Kingdom or Antwerp or Hamburg ,, ,, or London and Antwerp or London and Hamburg or Antwerp and Hamburg	1	Pale Lubricating Oil.
	3500	17/- 17/6 18/- 2 ports	Port Arthur (Texas)—United Kingdom or Havre or Antwerp Port Arthur (Texas)—Rouen ,, ,, United Kingdom, Havre, Antwerp	1	Refined Lubricating and/or Gas Oil.
	4300	10/9 11/3 11/6 2 ports	Batoum—Rotterdam ,, Hamburg ,, Rotterdam and Hamburg	1	Refined.
	3800	13/6	Philadelphia—Rouen	1	Crude.
	3250	14/6 1 port 15/6 2 ports	New York, Philadelphia—Cette or Marseilles or Port de Bouc or St. Louis du Rhone	1	Refined.
	3000	30/-	Kustendje or Braila—Campana (River Parana)	1	Crude.
	5400	7/6	Port Arthur (Texas)—Havana	1	Gas Oil.
	3500	16/3	Kustendje—Rouen	1	Spirit.
	4600	10/-	Batoum or Novorossisk—London	1	Refined.
	4600	13/- 14/3	Black Sea—French Atlantic Ports, excluding Rouen ,, Rouen	1, 2 or 3	Spirit.
	2500	15/6	Kustendje——Bordeaux River or Harve or Rouen	1	,,
	5100	10/6 11/- 11/3 2 ports	United States (North Atlantic Ports)—United Kingdom or Continent (Ostende, Geestemuende) United States (North Atlantic Ports)—Hamburg ,, ,, ,, Rotterdam and Hamburg	1	Refined.

TANK CHARTERS—*Continued.*

	Tons Cap.	Rate per Ton.	Ports of Shipment and Destination.	Number of Voyages.	Cargo.
April	3800	12/6	Batoum—United Kingdom or Antwerp	1	Pale and/or Black Lubricating Oil.
		13/-	,, Hamburg		
		13/6	,, Rouen		
		15/- 2 ports	,, Rouen and Hamburg		
	3000	14/6	Braila—Vallö	1	Crude.
	5100	5/-	Hamburg—Rouen	1	Refined.
	5000	9/6	United States (North Atlantic Ports)—United Kingdom	1	Gas Oil.
	6000	9/6	,, ,, ,, United Kingdom or Continent (Ostende, Hamburg inclusive)	1	Refined.
	3100	13/-	Kustendje—La Pallice	1	Refined and Crude.
		13/6	,, Rouen		
		14/3 2 ports	,, La Pallice and Rouen		
	6100	9/6	United States (North Atlantic Ports)—United Kingdom or Continent (Ostende, Hamburg inclusive)	1	Refined and/or Gas, and/or Lubricating Oil.
	3250	10/6	Batoum or Novorossisk—Rotterdam	1	Refined.
		11/-	,, ,, Hamburg		
		11/3 2 ports	,, ,, Rotterdam and Hamburg		
	4000	12/6 1 port	New York or Philadelphia—French Atlantic Ports, excluding Rouen	1	,,
		13/6 2 ports			
		13/6	New York or Philadelphia—Rouen		
		14/- 2 ports	,, ,, One French Atlantic Port and Rouen		
	3500	17/3	Port Arthur (Texas)—United Kingdom or Antwerp	1	Lubricating Oil and/or Gas Oil.
		17/9	,, ,, Continent (Havre, Hamburg inclusive)		
	3000	17/6	,, ,, Cette	1	Refined.
	5200	9/6	Batoum or Novorossisk—London or Manchester	1	,,
		£225 extra.	,, ,, Manchester and Cardiff (two ports)		
	2400	?	Kustendje or Braila—Campana	?	Crude.
	5100	10/6	Philadelphia—Hamburg	1	Refined.
May	5200	17/-	Port Arthur (Texas)—United Kingdom or Continent (Ostende, Bremerhafen)	1	,,
		18/-	,, ,, Hamburg		
	5100	£1,150 per month	For trading in the Far East, delivery Singapore, redelivery Suez	3 months	,,
	3800	13/6	Philadelphia—Rouen	1	Crude.
	5200	9/9	Batoum or Novorossisk—London or Manchester	2	Refined.
	6000	30/-	United States (North Atlantic Ports)—Bombay	1	Refined and/or Batching Oil.
		34/-	,, ,, ,, Calcutta		
	4600	10/-	,, ,, ,, United Kingdom, including Manchester	1	Refined and/or Gas Oil.
	3250	7/6 (minim'm 2070 tons)	Hamburg—Bergen	1	Refined.
	3500	13/6	Kustendje—Cette	1	Spirit.
		16/-	,, Rouen		
		16/- plus £150	,, Cette and Rouen (two ports)		
	3800	17/6	Port Arthur (Texas)—London	1	Refined.
June	5000	14/-	United States (North Atlantic Ports)—West Coast Italy or Sicily	1	,,
		15/6	,, ,, ,, Venice		
	6000	9/9	Batoum or Novorossisk—United Kingdom	1	,,
	6100	10/9 1 loading port	,, Antwerp and London (two ports)	1	,,
		11/3 2 ,, ports	,, and Novorossisk—Antwerp and London (two ports		
	5000	10/6	Batoum or Novorossisk—United Kingdom	1	Refined and/or Solar Oil.
		11/6	,, ,, ,, two ports on the same coast		
		11/3 2 ports	,, ,, Liverpool and Manchester		
	5000	10/6	,, and/or ,, Rotterdam	1	Refined.
		11/6	,, ,, ,, Hamburg		
		11/9 2 ports	,, ,, ,, Rotterdam and Hamburg		
	5000	10/3	Philadelphia—Manchester	1	Gas Oil
	2200	13/6 1 port	Batoum—Havre or Rouen or Calais	1	Pale Lubricating Oil,
		14/6 2 ports	,, Havre and Rouen, or Havre and Calais, or Rouen and Calais		
		15/- 3 ports	,, Havre and Rouen and Calais		
	3500	£2,250 lump sum.	Sulina—Rouen	1	Refined and/or Spirit.
	4800	11/-	United States (North Atlantic Ports) or Batoum—French Atlantic Ports, excluding Rouen	2	Crude or Distillate.
		11/6	United States (North Atlantic Ports) or Batoum—Rouen		
		10/6	Kustendje—French Atlantic Ports, excluding Rouen		
		11/-	,, Rouen		
	6000	9/9	United States (North Atlantic Ports)—United Kingdom or Continent, excluding Hamburg	1	Refined.
		10/3	United States (North Atlantic Ports)—Hamburg		
	4500	10/3	,, ,, ,, United Kingdom or Continent (Ostende, Bremerhafen)	1	,,
		10/9	United States (North Atlantic Ports)—Hamburg		
		14/-	,, ,, West coast Italy or Sicily		
		14/6 2 ports	,, ,, ,, ,,		
		15/4½	,, ,, Venice		
		15/10½ 2 ports	,, ,, Venice and Messina		
	4500	13/-	,, ,, or Batoum or Novorossisk or Kustendje—French Atlantic Ports, excluding Rouen	1, 2 or 3	,,
		14/3	United States (North Atlantic Ports), or Batoum, or Novorossisk, or Kustendje—Rouen		
		14/3	Braila—French Atlantic Ports		
		14/9	Braila and Kustendje—French Atlantic Ports		

(To be concluded.)

The American Oil Market.

New York, Week ended Feb. 9th.

Reports from the oil fields noted no improvement in the general outlook, and as a result of the severe cold weather, development work in the fields was brought nearly to a standstill. Should the cold weather continue, a material curtailment in the completions is looked for, and low records in this respect are promised. Work in the old fields was scattered, and the new production was mainly held up by the shooting of old wells than drilling in new. In few districts in the old fields only few scattered wells above the average production were brought in. The movement in making new discoveries continued slow, says the *Oil Paint and Drug Reporter*, but there continued hope for new pools and extensions to the old fields which have not been abandoned. In the Illinois field there has been a decrease in development work, notwithstanding the facilities for handling the oil. Impassible roads restricted the hauling of material to points to start new work. Reports from the Mid-Continent field note that only ordinary work has been going on, and aside from wildcat wells drilling only several of them attracted attention. During January in the Indian Territory 153 wells were completed, of which 13 were dry holes and 9 gassers, leaving 131 wells producing oil, 17,700 barrels being new production. During the month of January the pipe line runs of oil from the Mid-Continent field exceeded those for any one month in the history of the petroleum developments west of the Mississippi River. The runs during the months of January exceeded the shipments, the former aggregated 2,337,164 barrels, against the latter, which amounted to 1,646,090 barrels, leaving 691,074 barrels to go into tankage, making total stocks in tanks and pipes on February 1st, 24,008,3;0 barrels. Stocks during the month of January increased 1,057,306 barrels. Reports from the Texas fields note at Beaumont, the Spindle Top field has gained over 1,500 barrels per day in production during the month of January by bringing in new wells, and the total production stands now at about 4,500 barrels per day more than that produced in a year or so. The high price of oils stimulated the increase in the production of the old fields. At Hockley, development of an oil field is progressing, and there are prospects of a big oil field there. It is the belief that other great gusher fields in Texas will be discovered, and that the future of the oil business in that State is promising. The following are the prices of Texas oil:—Sour Lake, 73c.; Saratoga, 69c.; Humble, 71c.; Jennings, 66c.; Shreveport, 66c.

Refined and Products.—The demand for refined for export has been fair, and trade in the local market continued seasonable. The total engagements during the week in the local market amounted to over 162,000 barrels.

The price for barrelled oil for export closed firm, and the market is quoted at 7·75c. for New York loading, and 7·70c. for Philadelphia loading. The principal foreign markets remained firm. Freight rates are firm at 2s. 2d. @ 3s. od. hence to London, and 2s. 3d. @ 3s. od. to Continental ports, as to port and vessel.

Cases for export were quiet, and no sales were reported. The price of plain tops closed firm at 10·25c. Freight rates closed firm and unchanged.

Crude for export remained quiet, and no sales were reported. Pennsylvania crude closed at 7·60c. in barrels. Cases for export have been quiet, and no sales have been reported.

CLOSING QUOTATIONS.

Crude.		Week ended Feb. 2. 1907.	Feb. 9. 1907.
National Tran. Certificates	per bbl.	$1·58@1·59	$1·58@1·59
Pennsylvania crude in bbls.	per gal.	7·60	7·60
Pennsylvania crude in bulk	.. ..	4·50	4·50
Residuum, bbls. for export	.. ..	6@6½	6@6½

Crude at the Wells.

The quotations for oil represented by credit balances were;—

	Week ended Feb. 9. 1906.	Feb. 9. 1907.
Tiona	1·68	1·68
Pennsylvania	1·58	1·58
North Lima	0·94	0·90
South Lima	0·89	0·85
Indiana	0·89	0·85
Canadian Oil:		
Petrolia	1·34	1·30

Refined—For Export.

		Week ended Feb. 2. 1907.	Feb. 9. 1907.
Cargo Lots for export	in barrels	7·75	7·75
	in bulk	4·50	4·50
Philadelphia loading	in barrels	7·70	7·70

Refined in Cases—110 Fire Test.

	Week ended Feb. 2.	Feb. 9.
3,000 to 10,000	10·40	10·40
1,000 to 3,000	10·45	10·45

Refined—Jobbing Lots.

In barrels, pkgs. included.

		Week ended Feb. 2.	Feb 9.
120 fire test, S.W.	in barrels	12	12
130 fire test, S.W.		12½	12½
150 fire test, W.W.		13	13½
In bulk from tanks		10	10
300 fire test		12¾@13½	12¾@13½

Naphtha and Gasolene.

	Week ended Feb. 2.	Feb. 9.
Naphtha, crude, car. lots, 68 @ 72 deg.	15·00	—
Gasolene, 86 deg.	23·00	23·00

Pennsylvanian Oil Runs from Feb. 1st to Feb. 7th were:—Feb. 1st, 159,650; Feb. 4th, 131,986 Feb. 5th, 108,562; Feb. 6th, 131,626; Feb. 7th, 122,887. For the month of December, 2,999,369.

The Deliveries of Pennsylvania Oil for the same dates were:—134,165; 75,088; 165,335; 93,091 98,055. For the month of Dec., 4,576,554.

Charters for the Week.

The total charters for refined, crude, naphtha, etc., in bulk, barrels and cases, during the week ended February 8th and from Jan. 1st, were as follows:—

	Week.	Year.	1906.
Refined, barrels and bulk	161,500	844,510	1,302,800
Refined, cases	37,741	1,572,741	1,836,000
Crude, barrels and bulk	10,469	10,469	235,200
Crude, cases	—	—	25,000
Naphtha, barrels	87	87	57,000
Residuum, barrels	40,790	40,790	104,100
Lubricating, barrels	—	—	53,400
Total, barrels cde. eq.	310,059	2,880,204	2,992,852

Clearances for the Week.

During the week ended Feb. 8th, and since Jan. 1 the clearances of petroleum, in gallons, from the port of New York, were as follows:—

	Week.	Year.	1906.
Refined	8,970,730	55,708,550	50,935,180
Crude	—	204,270	7,700
Naphtha	79,650	816,590	1,073,150
Residuum	—	6,250	—

Export Statistics.

The total exports from the port of New York and from the United States have been:—

	Gallons.
From New York, week ended Feb. 8th	11,960,973
Total from New York, from Jan. 1st, 1907	73,878,198
Same period last year	67,924,606
Increase	5,953,592
From United States, week ended Feb. 8th	17,503,989
Total from United States, since Jan. 1, 1907	131,390,591
Same period last year	128,280,361
Increase	3,110,231

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The "Review" Shipping List.

March 1, 1907.

(The following abbreviations are used in this table:—L. Left; P. Passed; Arr. Arrived; Sp. Spoken; Tr. Trading.)

Vessel.	From.	For.	Latest Date and Position.
ALICE ISABELLE	Sables d'Olonne	Philadelphia	L. Feb. 7
ALCHYMIST	Terneuse	Hamburg	Arr. Feb. 25
ALEMBIC	New York	Sydney	L. Jan. 23
AMERICAN	San Francisco	New York	Cl. Norfork (Va.), Feb. 15
APPALACHEE	Shanghai	San Francisco	Arr. Jan. 21
APSCHERON	Batoum	Antwerp	P. Constant'ple, Feb. 21
ARAL	Copenhagen	Tyne	Arr. Feb. 26
ARAS	London	Amsterdam	Arr. Feb. 23
ARGYLL	Port Harford	San Pedro	Arr. Feb. 4
ASTRAKHAN	Hamburg	Philadelphia	Arr. Feb. 26
ATLAS	Astoria	San Francisco	L. Jan. 29
AUGUST KORFF	Philadelphia	Liverpool	L. Feb. 26
AUREOLE	New York	Sunderland & Tyne	At Sunderland, Feb. 24
AZOV	—	—	Trading on W. C. of South Amca.
BAKU STANDARD	Tyne	Kustendje	P. Sagres, Feb. 19
BALAKANI	Port Arthur (Texas)	London	L. Newport News Feb. 15
BATOUM	London	Tyne	Arr. Feb. 2
BAYONNE	Hull	Tyne	Arr. Nov. 23
BEACON LIGHT	Philadelphia	Rouen	P. Havre, Feb. 25
BEME	Rangoon	Bombay and Mormugao	L. Bombay, Feb. 6
BLOOMFIELD	Philadelphia	Rotterdam	L. Feb. 17
BORJOM	Alexandria	Batoum	L. Feb. 18
BRILLIANT	Philadelphia	Copenhagen	L. Feb. 17
BROADMAYNE	Tyne	Port Arthur (Texas)	P. Dover, Feb. 1
BULLMOUTH	—	Shanghai	L. Feb. 21
BULYSSES	Soesoe	—	Arr. Feb. 21
BURGERMEISTER PETERSEN	Philadelphia	Hamburg	Off the Wight, Feb. 26
CADAGUA	Barry	Philadelphia	P. Barry Island, Feb. 14
CALCUTTA	San Francisco	Shanghai	L. Jan. 14
CARDIUM	Cardiff	Balekpappan	At Aroe Bay, Feb. 22
CATANIA	San Pedro	San Francisco	L. Feb. 13
CAUCASIAN	Cardiff	Batoum	P. Dardanelles, Feb. 22
CHARLOIS	Rotterdam	Philadelphia	Arr. Feb. 17
CHESAPEAKE	New York	Calcutta	P. Perim, Feb. 19
CHESTER	Antwerp	New York	Arr. Feb. 10
CIRCASIAN PRINCE	—	—	Trading on W.C. of South Amca.
CLAM	Singapore	—	L. Feb. 24
COWRIE	Batoum	Bombay	L. Aden, Feb. 18
COL. E. L. DRAKE	Sabine	New York	Arr. Jan. 12
CYMBELINE	Penarth	Batoum	P. Gibraltar, Feb. 22
CZAR NICOLAI II.	Batoum	Hamburg	L. Feb. 20
DAGHESTAN	Batoum	Hamburg	P. Peniche, Feb. 25
DELAWARE	Avonmouth	Batoum	P. Gibraltar, Feb. 17
DEUTSCHLAND	Rotterdam	New York	P. Feb. 18, 48 N., 29 W.
DIAMANT	Hamburg	New York	Arr. Feb. 17
ELAX	—	Tyne	Arr. Jan. 12
ELISE MARIE	Philadelphia	Christiana	P. Del. Break, Feb. 5
ENERGIE	New York	Rotterdam	Arr. Feb. 26
ERIVAN	Batoum	Antwerp	Arr. Feb. 27
ETELKA	Fiume	Batoum	P. Constant'ple, Feb, 21
EUPLECTELA	London	Batoum	P. Constant'ple, Feb. 21
EXCELSIOR	Novorossisk	Channel	L. Feb. 21
EZIO	—	—	Coasting Peru
FRANCE MARIE	Philadelphia	Marseilles	Arr. Feb. 24
GEESTEMUNDE	Gothenburg	Philadelphia	P. Dunnet Head, Feb. 13
GENESSE	Sunderland	New Orleans	Arr. Feb. 13
GEORGIAN PRINCE	Havana	Philadelphia	P. Reedy Island, Feb. 14

Vessel.	From.	For.	Latest Date and Position.
GOLDMOUTH	Balekpappan	Rotterdam	Cl. Thames Haven Feb. 27
GUT HEIL	Hamburg	Philadelphia	L. Tyne, Feb. 16
HAINAUT	Antwerp	New York	Off I. of W., Feb. 25
HELIOS	Philadelphia	—	P. WeserLightho. Feb. 26
HOTHAM NEWTON	Swansea	Batoum	L. Feb. 26
HOUSATONIC	Tyne	Philadelphia	P. Dunnet Head, Feb. 26
IMPERIAL	—	—	Tr. on Lakes btn. U.S. and Can.
JOANNIS COUTZIS	Rouen	Batoum	L. Feb 22
J. B. AUG. KESSLER	Hamburg	Rotterdam	Arr. Feb. 23
JAMES BRAND	Rouen	Tyne	Arr. Feb 18
JULES HENRY	Marseilles	Philadelphia	L. Jan. 16
KURA	Penarth	Philadephila	Arr. Feb. 25
LA CAMPINE	New York	Antwerp	Arr. Feb. 22
LA FLANDRE	Ghent	Philadelphia	P. Lizard, Feb. 21
LA HESBAYE	Antwerp	New York	Arr. Feb. 5
LA MADELEINE	Huelva	—	P. Sagres, Feb. 17
LA VIGUESA	Philadelphia	Seville	P. Del. Break, Jan. 20
LACKAWANNA	Calcutta	Bengkalis	L. Feb. 3
LANSING	San Francisco	Port Harford	L. Feb. 6
LE COQ	Cette	Kustendje	L. Feb. 18
LOUTSCH	Barcelona	Novorossisk	P. Dardenelles, Jan. 10
LUCERNA	Tyne	Philadelphia	P. Dunnet Head, Feb. 15
LUCIFER	Philadelphia	Manchester	L. Liverpool, Feb. 26
LUCIGEN	Bremerhaven	Tyne	Arr. Feb. 24
LUCILINE	Cette	Batoum	L. Feb. 22
LUMEN	Tyne	Philadelphia	Arr. Feb. 18
LUX	Rouen	Philadelphia	Arr. Feb. 20
MANHATTAN	Granatello	Batoum	L. Constant'ple, Feb. 20
MANNHEIM	Tyne	Philadelphia	At New York, Feb. 14
MARGARETHA	Alexandria	Kustendje	L. Feb. 18
MAVERICK	San Francisco	Astoria	Arr. Feb. 6
METEOR	Genoa	Constant'ple	L. Feb. 16
MEXICAN PRINCE	Hull	Cuba	L. Feb. 2
MIRA	Tyne	New York	P. Dunnet Head, Feb. 15
MUREX	Shanghai	—	Arr. Feb. 24
NARRAGANSETT	London	New York	P. Dunnet Head, Feb. 27
NERITE	—	—	Tr. in China Seas
NEW YORK	New York	Southampton	Arr. Feb. 17
OCEAN	New York	Philadelphia	L. Feb. 15
OILFIELD	Philadelphia	Rouen	Arr. Feb. 26
ORANJE PRINCE	Tyne	Cuba	P. Prawle, Feb. 18
ORIFLAMME	Rouen	Philadelphia	L. Feb. 24
OSCEOLA	Genoa and St. Vincent (C.V.)	Axim	Arr. Jan. 31
OTTAWA	Galveston	Vera Cruz	L. Feb. 8
OURAL	Batoum	Manchester	P. Constan'ple, Feb. 18
PALEMBANG	Madras	—	P. Colombo, Feb. 3
PAULA	New York	Swinemuude	L. Feb. 17
PECTAN	Port Arthur (Texas)	—	L. Feb. 24
PENNOIL	Philadelphia	Dover	P. Prawle, Feb. 25
PERLAK	Singapore	Palembang	L. Jan. 28
PHOEBUS	Rotterdam	New York	Off the Wight, Feb. 22
PINNA	New York	Flushing	L. Feb. 14
POTOMAC	Manchester	Philadelphia	Arr. Feb. 18
PROMETHEUS	New York	Rotterdam	L. Feb. 22
PRUDENTIA	Hamburg	Swansea	L Feb. 26
QUEVILLY	Rouen	Philadelphia	P. Lizard, Feb. 19
RION	Penarth	Philadelphia	P. Sand Key, Feb. 14

Vessel.	From.	For.	Latest Date and Position.
ROCK LIGHT	London	Port Arthur (Texas)	P. Sand Key, Feb. 14
ROSSIJA	Messina	—	P. Gibraltar, Feb. 27-28
ROTTERDAM	Rotterdam ..	New York ..	Arr. Feb. 24
RUSSIAN PRINCE	Cienfuegos..	New Orleans	Arr. Feb. 20
SALAHADJI	—	—	Tr. Sts. Settlem'ts and Java Seas
SAXOLEINE	Tyne	Philadelphia	P. Dunnet Head, Feb. 12
SEMINOLE........	San Francisco	Kurrachee ..	At Shanghai, Feb. 14
SILVERLIP	Cardiff	Balekpappan	L. Colombo, Feb. 8
SINGU	—	—	Tr. in East Indies
SNOWFLAKE	Novorossisk	Havre	P. Gibraltar, Feb. 25
SOPHIE	Batoum	Tunis	L. Malta, Feb. 21
SPONDILUS	Cardiff	Singapore ..	P. Aden, Feb. 22
STANDARD	Hamburg ..	Philadelphia	Arr. Feb. 20
STROMBUS	New York ..	—	L. Feb. 23
SURAM	Philadelphia	London	L. Feb. 16
SUWANEE	Dublin	Kustendje ..	L. Feb. 25
SVIET	Batoum	Odessa	L. Dec. 26
TELENA	Singapore ..	—	L. Port Natal, Feb. 24
TEREK............	New York & Avonmouth	Manchester	At Liverpool, Feb. 27
TIFLIS	Tyne	Batoum	L. Feb. 25
TIOGA	Philadelphia	Liverpool ..	Put back Feb. 20
TONAWANDA	San Francisco	Shanghai ..	L. Jan. 18
TROCAS	Palembang..	—	L. Feb. 17
TURBO	Novorossisk	Hamburg ..	P. Peniche, Feb. 26
TUSCARORA	Shanghai ..	San Francisco	Arr. Feb. 18
TWINGONE	Rangoon ..	Madras	L. Feb. 25
VEDRA	Cardiff......	Philadelphia	Arr. Feb. 19
VILLE DE DIEPPE	—	—	In Port Havre, Feb. 13
VILLE DE DOUAI	Dunkirk	Middlesboro	Arr. Feb. 25
VOLUTE	Palembang..	Singapore ..	Arr. Feb. 21 and L. Feb. 24
WASHINGTON	Bombay	Kustendje ..	At Suez, Feb. 25
WEEHAWKEN	Tyne	Philadelphia	L. Feb. 17
WILLKOMMEN ..	Plymouth ..	New York ..	L. Feb. 15
WINNEBAGO......	San Francisco	Shanghai ..	L. Feb. 14

Latest Market Intelligence.

LONDON OIL MARKET.

Supplied by Messrs. Benjamin & Gee, 31, St. Mary Axe, E.C.

March 1st, 1907.

There are no changes in the price of Refined Petroleum to report. The following are the latest importers' prices:—Russian and Roumanian, 6¼d.-6⅜d.; American, 6¾d.-6⅞d.; Water White, 7¾d.-7⅞d.

LUBRICATING OILS

are unchanged as follows:—

American pale, £7 7s. 6d. to £11.
American dark cylinder, from £7 12s.
American filtered cylinder, from £11.
No. 1 Russian, £10 7s. 6d.

TURPENTINE.

American Turpentine is very steady, although not much business doing, and the price remains the same as when last we reported, namely, for Spot 51s. 3d.

This is the price practically quoted for deliveries up to the end of June, but for deliveries from July to December quotations of about 4s. per cwt. less are made.

LIVERPOOL OIL MARKET.

March 1st.

Refined oils are quiet, and sellers quote 6½d. for Russian, Galician or Roumanian; and 6⅝d. to 7⅝d. per gallon for American.

Petroleum Spirit continues at 1s. 0½d. to 1s. 3d. per gallon for American deodorised, according to quality on the spot.

LATEST AMERICAN PRICES.

New York, March 1st.

Refined, in cases, is steady at 10·10 Standard White, 7·60; Credit balances, 1·60c.

Philadelphia, March 1st.

Standard White is still quoted at 7·45.

RUSSIA.

Baku, February 25th.

The Baku oil market is firm. Light crude oil, spot, 26¼ copecs per pood; residuals, in ships, spot, 27½; kerosene in ships, delivery during navigation, 28 copecs.

BELGIUM.

Antwerp, February 25th.

The petroleum market is unchanged. Price of Standard White, spot, 20½ francs per 100 kilos; March and April 20¾ francs.

FRANCE.

Paris, February 25th.

Illuminating oil is quoted in bulk, in whole tank waggons, 20·25 francs per hectolitre; spirit, 25·75 francs per hectolitre. Special white oil, 28·25 francs per hectolitre.

GERMANY.

Hamburg, February 23rd.

The kerosene market is firm. The price of American Standard White is 6·80 marks per 50 kilos, Russian, 6·55 marks.

ROUMANIA.

February 23rd.

	Francs.
Crude oil from different fields, including pipe line charges, per 100 kgs. ...	4·00-4·10
Refined oil, exclusive of taxes	13·00- —
Motor benzine, including taxes	16·00-18·00
Benzine, doubly refined	24·00-25·00
Residuals in tank waggons, at refinery ...	3·20-3·30
Paraffin	120·00-125·00
Lubricating Oils—	
Agricultural...	30-32
Prime	35-37
Extra	40-42
Royal	45-46

In barrels free on rail including octro tax of 12 fcs. per 100 kilos

Prices for Export.

Refined oil in tank waggons, per 100 kgs.	8·50- —
Benzine, sp. gr. 0·710-0·715	21·00-22·00
„ sp. gr. 0·720-0·725	19·00-20·00
„ sp. gr. 0·730-0·740	13·00-14·00
„ sp. gr. 0·745-0·755	9·00-10·00

INDIA.

Bombay, February 14th.

Petroleum is steady.

Standard Oil Co., of New York.

Current rates are:—

American, "Snowflake," 150 deg.	Rs. 6	0	2
„ Chester, 125 deg.	4	8	2
„ Monkey Brand, 125 deg.	4	0	2
„ Bulk, 125 deg. (in local made tins).. ..	3	10	0
„ „ 125 deg. (8 Imperial gallons) ..	3	0	0
„ "White Camelia" brand, 125 deg. ..	No stock.		

The Asiatic Petroleum Company, Limited.

Current rates are:—

"Swan" Brand oil, in tins, per pair	3	2	0
Sumatra "Rising Sun," bulk, per unit	3	0	0
„ „ tins, per pair	3	10	0
Silverlight cases, per case	4	8	0
Sumatra, "Anchor" per case	4	14	0

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IMPORTS of PETROLEUM into UNITED KINGDOM

Specially prepared for this Journal by the Custom House.

FOR THE WEEK ENDED FEBRUARY 18th, 1907—

Date.	Port and Importers.	Description.	No. of Gals.	Port Whence.
Feb.	London—			
12	London & India Docks Co.	Lub.	300	Hamburg
12	"	"	800	New York
12	Anglo-American Oil Co. (Hermione)	Gas	1,613,840	Philadel.
12	" (Narragansett)	Lamp	2,919,630	New York
12	" "	Lub.	99,720	"
13	" (Phoebus)	Lamp	528,060	"
13	" (Housatonic)	Naph.	1,314,300	Bengkalis
13	Mordaunt Bros.	Lub.	3,200	Philadel.
13	Scott's Wharf	"	5,000	New York
14	Anglo-American Oil Co.	"	58,000	"
14	Page, Son and East	"	360	Antwerp
15	Lubricating & Fuel Oils, Ld.	"	12,300	Philadel.
15	Underdown and Crighton	Tar Oil	1,100	Rotterdam
16	General Steam Nav. Co.	Lub.	120	Antwerp
16	T. H. Lee	"	140	Hamburg
16	A. Brown and Co.	"	2,000	"
16	"	"	2,800	Philadel.
16	G. Jennings	"	7,230	"
16	Fielder, Hickman and Co.	"	7,200	"
17	London and India Dock Co.	"	480	Hamburg
17	Page, Son and East	"	320	Antwerp
17	"	Lub.Gr.	480	"
	Liverpool—			
12	Meade-King, Robinson & Co.	Lub.	2,400	Baltimore
12	"	Resid.	1,930	Pt. Arthur
12	"	Lub.	33,520	Hamburg
12	Liverpool Storage Co.	"	2,400	New York
12	George B. Taylor	"	11,600	"
13	J. W. Fisher and Co.	"	2,400	"
14	Ismay, Imrie and Co.	"	2,000	"
14	Pickfords	"	800	Hamburg
14	W. B. Dick and Co.	"	14,680	Philadel.
15	Worthington and Boler	"	5,200	"
15	Liverpool Storage Co	"	58,600	"
15	"	M.Colza	4,200	"
15	Crew, Levick and Co.	Lub.	27,630	"
15	E. Harrison and Co.	"	7,200	"
15	Meade-King, Robinson & Co.	"	36,720	"
15	Midland Railway Co.	"	850	"
15	Geo. B. Taylor	"	25,200	"
15	Bowring Petroleum Co.	"	600	"
15	Vacuum Oil Co.	Lub. Gr.	20,000	"
16	American Line	Lub.	3,600	"
18	Vacuum Oil Co.	"	400	Hamburg
18	"	Lub.Gr.	320	Stockholm
18	Geo. B. Taylor	Lub.	70,520	New York
18	Meade-King, Robinson & Co.	"	8,000	"
18	"	"	4,800	Philadel.
18	"	"	9,600	Baltimore
18	W. Gibson and Sons	Lamp	2,050	Boston
18	Burnaby and Chantrell	Lub.	280	Hamburg
Feb.	Barrow—			
18	Anglo-American Oil Co. (Suwanee)	Lamp	143,030	Philadel.
18	" "	Naph.	425,600	"
	Bristol—			
12	Pickford's	Lub.	360	Hamburg
14	H. R. James and Sons	"	3,200	New York
16	W. Smith and Co.	"	36,000	"
16	"	Lamp	9,000	"
	Grimsby—			
11	J. Sutcliffe and Sons	Lub.	200	Hamburg
	Hull—			
12	Hull & Netherlands S.S. Co.	Tar oil	3,600	Rotterdam
12	W. Gilyott and Co.	Lub.	28,000	New York
12	Anglo-American Oil Co. (Weehawken)	Lamp	1,037,700	"
12	Wilsons and N.E. Railway Shipping Co.	Lub.	7,400	"
12	" "	"	2,120	Hamburg
12	" "	"	8,000	Antwerp
14	" "	"	400	Reval
14	" "	"	800	"
14	" "	Naphtha	600	"
14	" "	Lub.	1,480	Hamburg
15	" "	"	400	"
15	" "	"	8,000	Trieste
	Manchester—			
12	George B. Taylor	"	138,200	New York
12	W. Hodgson and Co.	Lub. Gr.	960	"
12	Bramwell, Fern and Co.	Lub.	3,530	"
12	Liverpool Storage Co.	"	1,200	"
12	J. T. Fletcher and Co.	"	720	Antwerp
12	Geo. B. Taylor	"	200	Hamburg
	Middlesbro'—			
14	J. J. Sutherland	"	3,520	Antwerp
	Newcastle—			
12	Tyne-Tees Steamship Co.	"	4,600	"
14	"	"	160	Hamburg
14	P. H. Matthiessen and Co.	"	160	Bergen
	Plymouth—			
14	Anglo-American Oil Co. (Wilhommen)	Royal Daylight	536,230	New York
	Glasgow—			
14	Anchor Line	Lub.	64,760	"
15	"	"	33,400	"
18	"	"	77,300	"
18	J. and A. Allan	"	59,500	Philadel.
18	"	M.Colza	5,000	"
	Grangemouth—			
15	W. Graham-Yooll and Co.	Lamp	3,920	Hamburg
15	J. Currie and Co.	Lub.	460	"

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QUALITY TELLS.

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Date.	Port and Importers.	Description.	No. of Galls.	Port Whence.
Feb.	Leith—			
12	J. Currie and Co.	,,	240	Copenhagen
12	,, ..	,,	200	Hamburg
12	W. Graham-Yooll and Co...	Lamp	9,720	,,
14	,, ...	,,	13,080	,,
16	,, ...	,,	7,980	,,
16	J. Currie and Co.	Lub.	400	Bremen
16	W. Gibson and Co.	,,	160	Antwerp
	Total for Week		9,619,370	

FOR THE WEEK ENDING FEBRUARY 25th, 1907—

Date.	Port and Importers.	Description.	No. of Galls.	Port Whence.
Feb.	London—			
19	London and India Dock Co.	Lub.	2,600	Hamburg
19	General Petroleum Co. (Aras)	Lamp	408,500	Philadel.
19	Anglo-American Oil Co. ..	Lub.	96,600	,,
19	,, ...	M.Colza	10,000	,,
20	Lubricating & Fuel Oils, Ld.	Lub.	4,100	,,
20	,, ,,	,,	2,460	,,
20	Schliemans Oil Co.	,,	6,750	Reval
21	Leach and Co., Ltd. ..	Lub. Gr.	1,310	Ghent
21	Page, Son and East.. ..	Lub.	200	Antwerp
21	Produce Brokers	,,	2,800	Hamburg
21	British and Foreign Wharf..	,,	4,600	Genoa
21	G. and H. Green	L.Comp.	3,330	Boston
21	J. Spurling	Lub.Gr.	560	New York
21	G. W. Sheldon and Co. ..	,,	1,610	,,
21	Mordaunt Bros.	Lub.	2,500	Philadel.
22	Wilkins, Campbell and Co.	,,	4,040	,,
22	Grindley and Co.	,,	4,000	,,
22	Schenker and Co.	,,	1,000	Antwerp
22	T. H. Lee	,,	140	Hamburg
23	,, ...	,,	160	Rotterdam
23	Craven Co.	,,	240	Hamburg
23	Fielder, Hickman and Co...	,,	16,520	Philadel.
23	Produce Brokers' Co. ..	,,	10,800	,,
23	Bowring Petroleum Co. ..	,,	7,580	,,
23	Anglo-American Oil Co. ..	,,	26,800	,,
23	,, ..	M.Colza	10,000	,,
25	Asiatic Petroleum Co. .. (Goldmouth)	Benzine	1,137,950	Balek Pappan
25	G. W. Sheldon and Co. ..	Lub.	360	New York
25	Fielder, Hickman and Co...	,,	1,200	,,
25	,, ,, ..	,,	1,800	Stettin
25	,, ,, ..	,,	5,400	,,
25	London and India Docks Co.	,,	900	Hamburg
25	Page, Son and East.. ..	,,	360	Antwerp
	Liverpool—			
19	Valvoline Oil Co.	,,	17,430	New York
19	Cunard Steamship Co. ..	,,	2,020	,,
19	George B. Taylor	,,	28,400	,,
19	,, ...	,,	800	,,
19	J. Light and Son	,,	1,000	,,
19	Meade-King, Robinson & Co.	Resid.	8,000	Trieste
20	G. B. Taylor	Lub.	3,500	New York
21	Liverpool Storage Co. ..	,,	3,400	Stettin
22	E. Harrison and Co. ..	,,	10,000	Baltimore
22	,, ..	,,	15,160	Philadel.
22	Worthington and Boler ..	,,	1,000	,,
22	W. B. Dick and Co. ..	,,	6,200	,,
23	Crew, Levick and Co. ..	,,	10,420	,,
23	,, ...	M.Colza	4,120	,,
23	Geo. B. Taylor	Lub.	29,600	,,
25	,, ...	,,	3,000	Philadel.
25	A. Hopps and Sons.. ..	,,	2,870	,,
25	,, ...	,,	2,530	New York
Feb.				
25	Vacuum Oil Co.	Lub.	11,680	,,
25	Bramwell, Fern and Co ..	,,	810	,,
25	Liverpool Storage Co. ..	,,	37,520	,,
25	W. B. Dick and Co... ..	,,	16,930	,,
25	Valvoline Oil Co.	,,	5,130	,,
25	Meade-King, Robinson & Co.	,,	2,400	Baltimore
25	Stockdale and Doel	,,	4,720	Boston
25	W. Gibson and Sons ..	Lamp	2,050	,,
25	Anglo-American Oil Co. .. (Lucifer)	Gas	678,690	Philadel.
25	W. Field	Lub.	300	Antwerp
	Bristol—			
19	Pickford's, Ltd.	,,	800	Hamburg
19	H. R. James and Sons ..	,,	13,320	New York
19	,, ..	M.Colza	4,640	,,
23	Pickford's, Ltd.	Lub	280	Hamburg
	Goole—			
19	Goole Steam Shipping Co...	,,	140	Hamburg
22	,, ,, ..	,,	640	Antwerp
	Grimsby—			
19	J. Sutcliffe and Son	,,	540	,,
	Hull—			
19	Wilsons and N.E. Railway Shipping Co.	,,	1,600	Hamburg
21	,, ,,	,,	1,600	,,
21	,, ,,	,,	2,400	Antwerp
22	,, ,,	,,	880	,,
22	Meade-King, Robinson & Co.	Spirit	2,800	Rotterdam
23	W. Gilyott and Co.	Lub.	21,800	New York
	Manchester—			
23	Liverpool Storage Co. ..	,,	11,600	Philadel.
23	Crew, Levick and Co. ..	,,	16,800	,,
23	Geo. B. Taylor	,,	34,800	,,
23	Morton and Sons	,,	3,440	,,
	Newcastle—			
19	Tyne-Tees S.S. Co. ..	,,	2,120	Hamburg
19	,, ...	,,	280	Antwerp
	Sunderland—			
25	Anglo-American Oil Co. (Aureole)	Lamp	1,097,560	New York
	Swansea—			
25	Richards, Turpin and Co.	Lub.	5,800	,,
	Dundee—			
21	D. Alexander and Sons ..	Crude	400	Hamburg
	Grangemouth—			
19	W. Graham-Yooll and Co...	Lamp	1,840	,,
19	J. Currie and Co.	Lub.	10,320	,,
	Leith—			
21	J. Currie and Co.	,,	220	,,
23	G. Gibson and Co.	,,	200	,,
	Belfast—			
21	T. Dixon and Co.	,,	1,070	Baltimore
	Dublin—			
25	Anglo-American Oil Co. .. (Suwanee)	Lamp	429,080	Philadel.
	Total for the Week ..		4,353,820	
	Total for the past Fortnight ..		13,973,190	
	To Correct previous returns ;—			
	Add—			
	Dublin—			
30/1	Alliance Gas Co. (Caucasian)	Gas	45,730	,,
	Deduct—			
	Liverpool—			
28/1	Anglo-American Oil Co. (Potomac)	Lamp	32,120	New York

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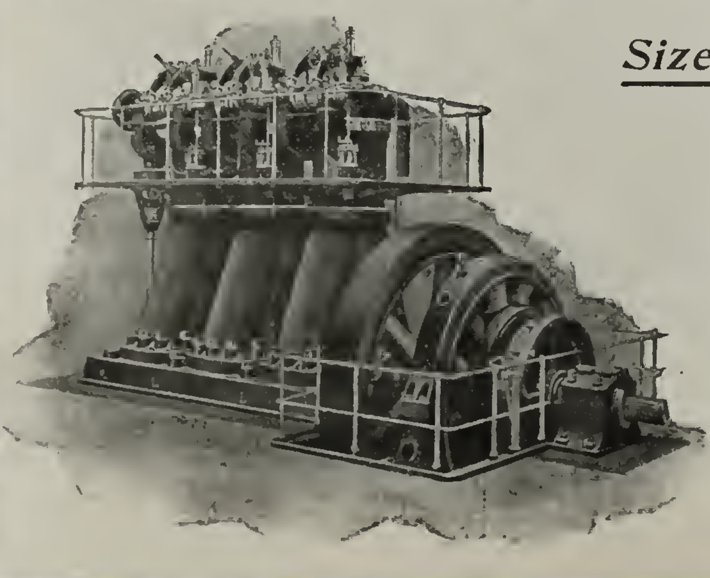

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The Petroleum Review.

By PAUL DVORKOVITZ.

Vol. XVI. *(New Series.)* March 16th, 1907. No. 394.

Editorial Notes.

Interesting Developments in England. Though from an early date natural gas has been known to exist in England in commercial quantities, there has not, up to the present, been any serious search for petroleum. This country, however, is no longer to be in the background in this respect, for a private syndicate has recently been formed in London under the title of the South-Eastern Development Syndicate, its object being to energetically test certain areas which are looked upon as offering great prospects. At the present juncture, it would not be politic to refer at length to the subject, but we have reason to believe that the first experiments will be carried out not far distant from that part of Sussex which has in the past been prominently associated with the production of natural gas.

Natural Gas and Oil. As is doubtless well known, the chief source of natural gas in this country is at Heathfield where for the past fourteen years or more, the gas has been turned to very good account for the lighting of the local railway station, and it is not at all surprising to find that this district will (we believe) be the area to be tapped by the new syndicate. Like most other discoveries, this was made under strange circumstances, and when the gas made its appearance it was by no means welcome. A borehole was being sunk for water in the back yard of one of the hotels, when at a depth of considerably less than 250 feet a strong flow of natural gas was encountered. The discovery was unwelcome, and the well was sealed up as it was considered dangerous. At a later period, however, another well was sunk for water with the same result—no water, but plenty of natural gas. This time the well was not considered exceedingly dangerous, for it was capped, and since that time has been yielding thousands of cubic feet per week for lighting and heating purposes. A limited company has for some years partially tested the neighbourhood for gas, a number of wells having been drilled with satisfactory results, so far as regards encountering gas, and now that the search is to be actively continued by an influential syndicate for petroleum, we are sure the district of south-eastern Sussex will immediately become a very interesting spot, and developments will be keenly watched.

Where Ignorance is Bliss ——. Renewed activity is now conspicuous throughout many of the producing fields of the United States, not an inconsiderable part of which is due to the advance in crude prices which has been made by the Standard Oil Co. to the operators. In this connection it is distinctly humorous to notice the comments that have appeared in both the American and English press. The advance, we should mention, took place almost simultaneously with the announcement of the gift of Mr. J. D. Rockefeller of £6,500,000 to the cause of American education, and cartoonists, paragraph writers and gentlemen of the editorial chair all immediately jumped to the conclusion that this was a move of the Standard to recompense its founder. How absurd such a statement is can be appreciated even by the "man in the street." The Standard Oil Co. is a very large buyer of the various crude oils of America, and consequently every cent advance in crude oil prices means a heavier outlay by the company in the purchase of crude oil for its refineries. Our excellent contemporary journal the *Manufacturers' Record* of America hits the nail on the head when it says that the advance goes to the producer, and there are many thousands of people interested in the producing of oil and the ownership of oil wells who are rejoicing that the Standard Co. has now bid a higher price by virtue of the increasing demand for oil. It is a great pity that cold type is resorted to by so many people rather than a careful regard to facts.

America's Declining Petroleum Exports. There is no doubt about it that the petroleum export trade of America is in a very unsatisfactory condition, for the improvement which was noted during the closing weeks of 1906 appears to have been but of a temporary nature. The statistics of January's petroleum exports from the States shew a decided slump, which, worked into hard cash, means a drop of about $1,500,000. The decrease amounted to over 20,000,000 gallons for the opening month of the year, this being shared by every important branch of the export trade—illuminating oils, lubricating and naphthas—and for which the Government alone is responsible. If the petroleum export trade of America is to continue to follow this retrograde movement, we dare not even hazard an opinion as to the seriousness of the consequences. We have reason, however, to believe that during February the petroleum export trade assumed a more hopeful character.

The Situation at Baku. Notwithstanding the fairly substantial figure of the output of the Baku fields during the first half of February, the Baku oil market remains very firm. The latest quotations for crude are 26½ to 26¾ copecs, and for residuals, delivery during navigation, and kerosene 29 copecs per pood. It is quite impossible to form any definite idea as to the future. The frequently recurring strikes at the oil fields convey a very imperfect idea of the labour conditions, for the demands put forward by the men are exaggerated, and, in the majority of cases, not justified by the conditions of the producing industry. The conferences of petroleum producers held at St. Petersburg and Baku, and which, among other things, also dealt with the labour questions, have not produced any practical results, and the agreements prepared for the hire of workmen are not sufficiently well formulated. On the other hand, it must be admitted on the side of the employers there is a want of concerted action, and therefore the unjust demands of the workmen cannot be successfully combated. At the present time work is in progress upon practically all the properties, but partial strikes are of almost daily occurrence.

PRODUCTION OF GAS, COAL GAS, ETC., IN THE UNITED STATES.

A report on the production of gas, coke, tar and ammonia at gas works and in retort coke ovens during 1905 has been prepared by Mr. Edward W. Parker, of the United States Geological Survey.

The present report includes, in addition to the statistics of the production of gas, coke, tar, and ammonia at gas works and in by-product coke ovens, a statement of the quantity of gas and tar produced at water-gas works using crude oil for enriching purposes. These statistics have not been considered in any of the preceding reports. At some of the gas houses oil is used with the coal in the production of gas, but the entire production is included in the statistics of coal gas.

The total quantities of these products in 1905 were 40,454,215,132 cubic feet of gas (not including that lost or wasted), 5,751,378 short tons of coke, 80,022,043 gallons of tar, 46,986,268 gallons of ammonia liquor (equivalent to 22,455,857 pounds of anhydrous ammonia), and 38,663,682 pounds of ammonia sulphate. In 1904 the production was 34,814,991,273 cubic feet of gas, 4,716,049 short tons of coke, 69,498,085 gallons of tar, 52,220,484 gallons of ammonia liquor (equivalent to 19,750,032 pounds of anhydrous ammonia), and 28,225,210 pounds of ammonia sulphate. The total value of all these products in 1905 was $56,684,972 against $51,157,736 in 1904.

Returns were received from 477 oil and water-gas producing companies, and these shew that the total production of water gas in 1905 was 82,959,228,504 cubic feet. Of this quantity, 5,547,203,913 cubic feet, or 6·7 per cent., were lost by leakage, etc., leaving 77,412,024,591 cubic feet as the net production obtained and sold. As the quantity of gas made and sold at coal gas and by-product coke oven works was 40,454,215,132 cubic feet, it appears that the consumption of water gas and gas made from crude oil was nearly twice as much as that made from coal.

LONDON OIL SHARE MARKET.

Friday, March 15th, 1907.

The period that has elapsed since our last issue has been a very critical one for the General Stock Markets, and as we write, rumours of serious financial difficulties in connection with influential houses are still causing grave uneasiness. The most significant feature has been the severe fall in Consols, which, at 84¼ for cash, have recorded the lowest point touched since 1866, when the stock stood on a 3 per cent. basis.

Fortunately, Oil Shares have not been adversely affected; indeed, in the few instances that changes occur, a slightly better tendency is discernable, while Shell Transport Ordinary has registered a sharp advance.

Compared with the figures we published in our last issue, the following Tuesday Assam Oil lost $\frac{1}{16}$ at $\frac{9}{16}$-$\frac{11}{16}$, but Baku Ordinary were a little firmer, being quoted at the closer price of 2s. 6d. to 3s.

With Wednesday's dealings Shell Transport Preference advanced ¼ to 9¾-10¼, and Russian Ordinary rose 1s. at 8s. to 9s. This better tendency extended to Thursday, when Shell Transport Ordinary jumped 5s. per share to 42s. 6d. to 43s. 6d., although Californian Oilfields were easier at 5½-6. On the following Tuesday Shells lost 1s. of the rise, while Californians regained lost ground at 5¾-6¼, and next day Shells recovered to 42s. 6d. to 43s. 6d.

The mid-March settlement commenced on Tuesday, 12th inst., Contango rates being charged at about 6 to 8 per cent. for the continuation of Oil Shares, which shew but few alterations in the making-up prices from those fixed a fortnight ago.

Anglo-Russians at 1s., Baku Ordinary at 3s., Preference at ¼, Californian Oilfields 5⅞, and Russian Ordinary at 9s., are without change, while Russian Preference at 10s. 3d. shew a rise cf 3d. per share. Schibaieff Ordinary at 6s. and Preference at 2¼ register advances of 1s. and ⅛ respectively, and Shell Transport Ordinary have gained $\frac{5}{32}$ at 2$\frac{1}{16}$. The only decline is one of 3d. in Spies at 11s.

Latest quotations are given on page 154.

NEW TANKERS FOR THE ANGLO-AMERICAN OIL COMPANY.

The Anglo-American Oil Co. will, in a few months, add some new steamers to their well-known fleet of oil tankers. We are given to understand that orders for these will be placed shortly. At the present time Messrs. Harland and Wolff have on hand an oil barge which is understood to be the largest in the world. This is also for the Anglo-American Oil Co., and will be completed by the autumn of this year.

CLASSIFIED IMPORTS INTO UNITED KINGDOM UP TO MARCH 1th, 1907

IN GALLONS.

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Country.	Illuminating.		Lubricating.		Residuals.		Gas Oil. (Solar)		Benzine.		Fuel Oil.		Other Descriptions.		Totals.	
	Since Feb. 25.	From Jan. 1.	Since Feb. 25.	From Jan. 1.	Since Feb. 25.	From Jan 1.	Since Feb. 25.	From Jan 1.	Since Feb. 25.	From Jan. 1.	Since Feb. 25.	From Jan. 1.	Since Feb. 25.	From Jan. 1.	Since Feb. 25.	From Jan. 1.
Austria ...	—	—	8,000	37,640	8,000	40,000	—	—	—	—	—	—	—	—	16,000	77,640
Belgium ...	—	153 410	32,720	116,920	—	—	—	—	—	—	—	—	—	590	32,720	270,920
Canada ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dutch India.	—	—	—	—	—	—	—	—	—	4,540.830	—	—	—	—	—	4,540,830
Germany ...	43,580	1,067,930	37,530	343,190	—	2,000	—	—	—	—	—	—	400	2,200	81,510	1,415,320
Holland ...	480	480	—	1,440	—	—	—	—	36,250	123,680	—	—	9,360	34,980	46,090	160,580
Roumania ...	—	1,102,830	—	—	—	—	—	1,065,900	—	591,450	—	126,700	—	—	—	2,886,880
Russia ...	—	4,237,880	349,090	1,163,900	—	—	—	—	—	600	—	—	—	—	349,090	5,402,380
U.S.A. ...	2,445,070	19,090,330	2,037 350	8,047,680	10,550	21,340	2,746,920	11,474,260	—	426 110	—	—	23,740	407,280	7,263,630	39,467,000
Other Countries	—	—	—	6,610	—	—	—	—	—	2,500	—	40	—	240	—	9,390
	2,489,130	25,652,860	2,464,690	9,717.380	18 550	63,340	2,746,920	12,540,160	36,250	5,685,170	—	126,740	33,500	445,290	7,789,040	51,230,940

THE OIL INDUSTRY OF SCOTLAND.

THE CHEMISTRY OF THE SHALES.

In our last issue of the Review we dealt at length with the publication that has recently left the press, and which goes in a very thorough manner into the shale oil industry of Scotland. On that occasion we touched upon the second portion of the work—that relating to the working of the various shales—a portion that has been written by Mr. W. Caldwell. We now intend to deal with another portion of the work, which is from the pen of Mr. D. R. Steuart, of the Broxburn Oil Co., and which, among other matters, expounds the chemistry of oil shales. The author gives a most interesting history of the shale oil industry of the Lothians, but, before doing so, publishes a brief introduction in which he furnishes details of the various marketable products obtained from the distillation of the shale. The bituminous shale, it should be remembered, after being broken up by machines of special construction, and subjected to destructive distillation in retorts, gives crude oil, ammonia water and gas used as fuel. The refining of the crude oil by repeated distillations and treatment with chemicals results in the various marketable products being obtained :—

(1) Shale spirit or naphtha, with a specific gravity of from ·600 to ·745 at 600° F., this spirit being used chiefly as solvents.

(2) Illuminating oils, with an average specific gravity of about ·800.

(3) Gas or intermediate oils, with properties intermediate between those of the burning and lubricating oils, and used for gas making, gas enriching and cleaning purposes.

(4) Lubricating oils of high boiling point and viscosity, possessing a specific gravity of from ·865 to ·890.

(5) Solid paraffin, used for candle making and other such purposes ; and

(6) Still coke, still grease, etc., while

(7) From the ammonia water, sulphate of ammonia is obtained.

The shale oil industry of Scotland may be said to date from the year 1847, but in France shale distillation was carried on as a thriving industry some years earlier. In 1847, Mr. James Young was informed of the Alfreton petroleum by the late Lord Playfair, who held that he thereby originated not only the shale oil manufacture of Scotland, but also the petroleum trade of the world. Mr. Young worked at the Alfreton coal pit for petroleum until it was exhausted, after which he experimented with many varieties of English and Scottish coal, eventually finding the Torbanehill or Boghead gas coal in West Lothian suiting his purpose. In 1850 he took out a patent for the low temperature distillation of coal, and by the end of that year the Bathgate works were started by Messrs. Young, Meldrum and Binney.

In 1862 the supply of the Torbanehill mineral was exhausted, and the material became too valuable and expensive for the industry, the result being that shale was resorted to, but with widely different results. While the Torbanehill mineral yielded about 120 gallons of crude oil per ton, the shales first used furnished only 40 or 45 gallons per ton. Two years later, the patent of Mr. Young expired, and this led to a rapid expansion of the Scotch oil industry, but soon it received a severe check, for the discovery of oil in America and the great developments in Pennsylvania brought about strong competition, during which the prices for oil in this country fell considerable, for, while during one period of Young's patent illluminating oil was no less than 3s. 6d. per gallon, it soon fell to 1s. Then the Scottish industry was brought up to date. Retorts were improved to suit the circumstances, and to produce a purer oil with a larger proportion of heavy products, mechanical labour-saving arrangements were introduced, refining was improved and cheapened, and numerous economies of various kinds were affected. The chemicals used in refining were recovered, and the tars separated by them, the removal of which involved expense, but now became a source of profit as fuel. Then retorts specially designed for the manufacture of sulphate of ammonia were introduced and universally adopted, for the price of this product rose as high as £24 per ton, but, as the importation of nitrate of soda increased greatly, it fell in 1890 below £8 per ton, when burning oil sold at less than 6d. per gallon. The introduction of these new retorts led to greater economy of working, and whereas with the older type of retorts, a shale had to yield 30 gallons of crude oil per ton in order to be profitable, with the new retorts and the increased yield of ammonia and fuel gas, a shale furnishing 20 gallons per ton was remunerative.

As to the various quantities of products produced, we can take the latest official figures available, these being for the year 1904. During that twelve months the quantity of shale distilled was 2,709,000 tons, and the crude oil produced was about 63,900,000 gallons. The marketable products obtained by distillation and refining were as under:—Naphtha, 2,500,000 gallons; illuminating oil, 16,900,000 gallons ; gas oil, 37,000 tons ; lubricating oil, 39,000 tons ; wax, 22,000 tons ; and sulphate of ammonia, 49,000 tons, the total products being approximately estimated at a value of £2,000,000.

The author then proceeds to deal with the yield of oil in relation to the depth of shale from the surface, and points out that though there are exceptions, the generally accepted law is that shales deteriorate with depth. This feature is very marked in the Linlithgow district in the case of the Broxburn seam ; very distinct but not so acute at Broxburn, much less apparent at Oakbank, while at Pentland the increase of depth does not seem to diminish the yield of oil at all. This deterioration with depth is greatest towards the north, and it decreases towards the south. Owing to the variable character of the shales, it is difficult, says the author, to get a true average sample of any seam for analysis, but the following table based upon Mr. Steuart's results, and specially compiled for our readers, will go far to give a good idea of the yield of crude oil and sulphate of ammonia from the various shales in the different seams:—

	Yield of crude oil per ton of shale. In gallons.	Sulphate of ammonia yield. Pounds.
Airdrie shale (Springwell Colliery) ..	33	6
Westfield shale (Rutherglen)	24½	10
Monkland shale..	32	6·3
Levenseat shale (Broxburn)	34·3	4·3
Raeburn shale (Broxburn)	54½	7
Mungle shale (Middleton, Uphall) ..	36	30
Addiewell grey shale (Newbigging) ..	28	9
Fells shale	26 to 40	20 to 35
,, (Pentland)	32 to 34	19 to 20
Broxburn curly seam (Broxburn) ..	32	19·56
,, seam (Pentland)	20 to 24	20
Dunnet seam (Queensferry)	33	33½
,, ,, (Newliston)	33·6	12·1
Dunnet seam (Pentland)	32·65	23·06
Pumpherston Jubilee seam	20·8	53·75
,, or Maybrick seam (Roman Camp)	16·6	32·4
,, curly seam	29·2	52·6
,, plain seam	27	70

As already indicated, the Boghead or Torbanehill mineral was the first substance used in Scotland for oil making, and torbanite is by far the best yet discovered for that purpose or gas making. There have been several important lawsuits in this country and one in Germany to determine the question whether torbanite should be regarded as a coal or shale. No doubt, in the strict scientific sense, it is a very rich shale. It differs from coal in having a larger proportion of hydrogen in its composition, and in not leaving a coke on distillation. In ordinary gas coal the proportion of carbon to hydrogen is 100 to 10. With Torbanehill mineral it is 100 to 14. When heated in a retort or covered crucible the hydrogen unites with the carbon so as to carry it away as vapour or gas, and the residue left is not a coke, such as coal would give, but ash with a small proportion of carbon—a spent shale in fact. The volatile products contain a larger proportion of hydrogen atoms than 1 of carbon to 2 of hydrogen.

The Torbanehill mineral is of a brown or nearly black colour, having a yellow or fawn-coloured streak without lustre and sub-conchoidal fracture. It shews parallel banding by splitting, and, although homogeneous in appearance in the fresh state, shews stratification when spent in the retort. It is non-electric. It is a carbonaceous matter without structure mingled with the stems or roots of trees shewing structure, and the fossils were found throughout the bed, and not merely on the surfaces of seams as is general in coal. When being mined or broken up it had a gaseous smell, but, afterwards when breathed upon, it had a clayey odour. Pounded and moistened and worked with the hand, it was cohesive enough to make a brick. It was very indestructible, and did not deteriorate much with weathering. The seam itself was covered by a close, compact roof of cement, stone and shale, perfectly water and air-tight. Near basalt dykes it became a soft, sticky, brown substance resembling melted indiarubber. In the vertical retorts it sometimes stuck as a buttery mass, and would afterwards fall through the vacancy that had formed into the water lute below, and when taken out was plastic like putty. Tested in the laboratory, it takes fire readily, splits, but does not fuse, and burns with an empyreumatic odour, giving much smoke and leaving a considerable amount of white ash. The mineral varied throughout the field, and in different layers at the same place. Its specific gravity was 1·17 to 1·316. Dr. Fyfe found volatile hydrocarbons, 66·9 to 70·1 per cent.; fixed carbon, 6·6 to 16·3 per cent.; ash, 12·8 to 23·2. The specific gravity was not in proportion to the ash.

After dwelling further upon the Torbanehill mineral, and giving various analyses, the author proceeds to touch upon the nature and origin of kerogen in oil shale—kerogen, according to Prof. Crum Brown, being a name to express the carbonaceous matter in shale that gives rise to crude oil in distillation. In the oil shale, as in the Torbanehill mineral, paraffin and paraffin oil do not exist as such: they are created by the destructive distillation in the retorts. There is, he states, practically nothing in shale soluble in petroleum spirit, benzine, disulphide, ether and such solvents. All hydrogen and carbon compounds produced by inorganic reactions are soluble in these solvents, and this makes it almos certain (continues Mr. Steuart) that kerogen is of organic origin. The material has probably been deposited, together with clay, at the bottom of lagoons, and has there been subjected to maceration and microbe action. Part would decompose, and only that which could withstand the water would remain. Some shales are largely made up of entomostraca, and it is probable that the animal matter has in some places been converted into kerogen.

Oil shale may be composed of (1) vegetable matter which has been made into a pulp by maceration in water and preserved by combining with the salts in solution; (2) richer materials of many kinds, such as spores, which nature has provided with means for some protection against decay; and (3) a proportion of animal matter. The difference in the qualities and properties of the Torbanehill mineral and the shales might arise from differences in the minerals that made up the numus, variation in the character of the materials that made up the spores, variation in the nature of the animal matter, and also from modifications produced by age, and the different conditions to which they may have been subjected during their long history. Again, shale may be considered as torbanite containing a larger proportion of earthy matter from its original disposition, or perhaps shale is simply a torbanite that has deteriorated with age; for, as a general rule, the crude oil diminishes and the ammonia increases with the age of the shale.

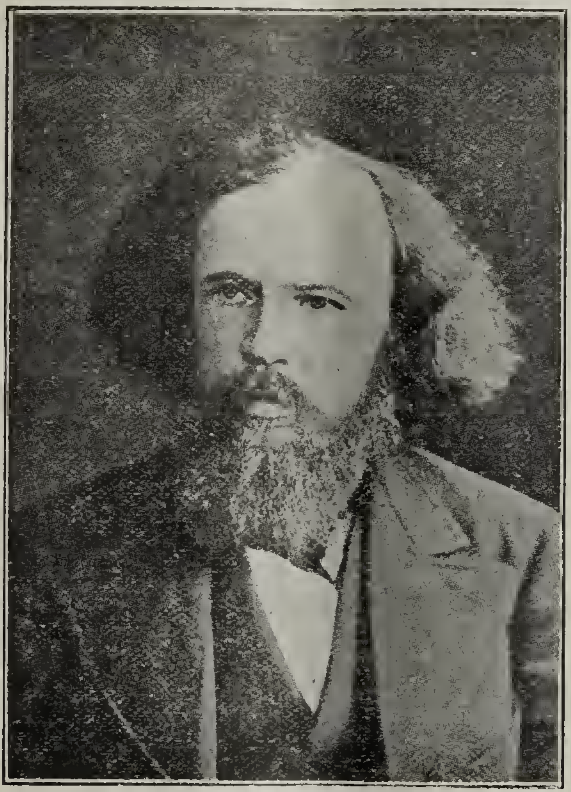
BAKU PRODUCTION DURING FIRST HALF OF FEBRUARY.

The production of crude oil at the Baku oil fields during the first 15 days of February amounted to 19,455,317 poods.

THE FORMATION OF PETROLEUM HYDROCARBONS.

Conclusions of the Late Prof. D. I. MENDELEEFF.

Our readers will recollect that in publishing the brief life story of the late Prof. D. I. Mendeleeff upon page 99 of the issue of the REVIEW of February 16th, reference was made to the conclusions of the late Professor in reference to the formation and existence in nature of large masses of petroleum hydrocarbons, and these we promised to publish in the next issue. Unfortunately pressure upon our space gave us no alternative but to hold the article over until this issue. In setting forth his contentions in this respect in his "Principles of Chemistry," the late Prof. Mendeleeff says:—Whether naphtha was formed from organic matter is very doubtful, as it is found in the most ancient Silurian strata which correspond with epochs of the earth's existence when there was little organic matter; it could not penetrate from the higher to the lower strata (more ancient), as it floats on water (and water penetrates through all strata). It therefore tends to rise to the surface of the earth, and it is always found in highlands parallel to the direction of the mountains. As during the process of the dry distillation of wood, seaweed and similar vegetable *debris*, and also when fats are decomposed by the action of heat (in closed vessels), hydrocarbons similar to those of naphtha are formed, it was natural that this should have been turned to account to explain the formation of the latter. But the hypothesis of the formation of naphtha from vegetable *debris* inevitably assumes coal to be the chief element of decomposition, and naphtha is met with in Pennsylvania and Canada in the Silurian and Devonian strata, which do not contain coal, and correspond to an epoch not abounding in organic matter. Coal was formed from the vegetable *debris* of the carboniferous, Jurassic and other recent strata, but judging from the composition and structure, it was subjected to the same decomposition as peat; neither could liquid hydrocarbons have been formed to such an extent as we see in naphtha. If we ascribe the derivation of naphtha to the decomposition of fat (adipose, animal fat), we encounter three almost insuperable difficulties:—(1) animal remains would furnish a great deal of nitrogenous matter, whilst there is very little in naphtha; (2) the enormous quantity of naphtha already discovered as compared with the insignificant amount of fat in the animal carcase; (3) the sources of naphtha always running parallel to mountain chains is completely inexplicable. Being struck with this last-mentioned circumstance in Pennsylvania, and finding that the sources in the Caucasus surround the whole Caucasian range (Baku, Tiflis, Gouria, Kouban, Taman, Groznoe, Daghestan), I developed in 1876 the hypothesis of the mineral origin of naphtha expounded further on. It is much more probable that the formation of naptha should be attributed to the action of water penetrating through the crevices formed on the mountain slopes to the heart of the earth, on that kernel of heated metallic matter which must be accepted as existing in the interior of the earth. And as meteoric iron often contains carbon (like cast iron) so, accepting the existence of such carburetted iron at unattainable depths in the interior of the earth, it may be supposed that naphtha was produced by the action of water penetrating through the crevices of the strata during the upheaval of mountain chains, because water with iron carbide ought to give iron oxide and hydrocarbons. During the upheaval of mountain ranges, crevasses would be formed at the peaks with openings upwards, and at the foot of the mountains with openings downwards. These cracks in the course of time fill up, but the younger the mountains (the Alleghany Mountains are, without doubt, more recent, they were formed during the tertiary epoch) the fresher the cracks; through them the water must gain access deep into the recesses of the earth to an extent that could not occur on the level of plains. The situation of naphtha at the foot of mountain chains is the principal argument in my hypothesis.



THE LATE PROF. MENDELEEFF.

Another fundamental reason is the consideration of the mean density of the earth. Cavendish, Airy, Cornu and many others, who have investigated the subject by various methods, found that, taking water = 1, the mean density of the earth is nearly 5·5. As at the surface water and all rocks (sand, clay, limestone, granite, etc.) have a density less than 3, it is evident (as solid substances are but slightly compressible even under the greatest pressure) that inside the earth there are substances of greater density—not less than 7 or 8. What conclusion can then be arrived at? Something heavy contained in the bosom of the earth must be scattered not only on its surface, but in the whole solar system, because everything tends to shew that the sun and planets proceed from the same material, and it therefore ought to be held that the earth and planets are but fragments of the solar atmosphere which have had time to cool considerably and become masses semi-liquid inside and solid outside, forming planets and satellites. The sun, amongst other heavy elements, contains a great deal of iron as shewn by spectrum analysis. There is also much of it in an oxidised condition on the surface of the earth. Meteoric stones, carried as fragments of the planets in the solar system, and sometimes falling upon the earth, consisting of siliceous rocks similar to terrestrial ones, often contain either dense masses of iron (for example the Pallasovo iron preserved in the St. Petersburg Academy of Sciences) or granular masses (for instance the Okhansk meteorite of 1886). For this reason it is possible that the interior of the earth contains much iron in a metallic state. This might be expected from the hypothesis of Laplace, for the iron must have been compressed into a liquid at that period when the other component parts of the earth were still strongly heated, and oxides of iron could not yet be formed. The iron was covered with slags (mixtures of silicates, like glass fused together with rocky matter) which did not allow it to burn at the expense of the oxygen of the atmosphere and water just at that time when the temperature of the earth was very high. Carbon was in the same state; its oxides were also capable of dissociation (Deville); it is also but slightly volatile, and has an affinity for iron, and iron carbide is found in meteoric stones. On this account the supposition of the existence of iron carbides in the interior of the earth was drawn by me from many indications, some of which are confirmed by the fact that granular pieces of iron have been found in some basalts (ancient lava) as well as in meteoric stones.

The following is a typical equation for the formation of iron oxide and hydrocarbons caused by the action of water upon iron carbide:—

$$3\,Fe_m C_n + 4m\,H_2O = mFe_3O_4 \text{ (magnetic oxide)} + C_{3n}H_{8m}.$$

Direct experiment proves that the so-called *spiegeleisen* manganiferous iron, rich in chemically-combined carbon, when treated with acids gives liquid hydrocarbons which in composition, appearance, and properties are completely identical with naphtha. Probably naphtha was produced during the upheaval of all mountain chains, but only in some cases were the conditions favourable to its being preserved underground. The water penetrated below formed there a mixture of naphtha and watery vapours, and this mixture issued through fissures to the cold parts of the earth's crust. The naphtha vapours, on condensing, formed naphtha, which, if there were no obstacles, appeared on the surface of land and water. Here part of it soaked through formations (perhaps the bituminous slates, schists, domites, etc., were thus formed) another part was carried away on the water, became oxidised, evaporated, and was thus driven to the shores (the Caucasian naphtha, probably in this way, during the existence of the Aralo-Caspian Sea was carried as far as the Sisran banks of the Volga, where many strata are impregnated with naphtha and products of its oxidation resembling asphalt and pitch); a great part of it was burnt in one way and another—that is, gives carbonic anhydride and water. If the mixture of vapours, water and naphtha formed inside the earth had no free outlet to the surface, it nevertheless would find its way through fissures to the superior and colder strata, and thus become condensed. Some of the formations (clays) which do not absorb naphtha were only washed away by the warm water and formed mud, which we also now observe issuing from the earth in the form of mud volcanoes. All the suburbs of Baku and the whole of the Caucasus in the neighbourhood of the naphtha districts are full of such volcanoes still from time to time in a state of eruption. In old naphtha beds (such as the Pennsylvanian), even these blowholes are closed, and the mud volcanoes have had time to be washed away. The naphtha and the gaseous hydrocarbons formed with it under the pressure of the underlying earth and water impregnated the layers of sand, which are capable of absorbing a great quantity of such liquid, and if above this there were strata impermeable to naphtha (dense clayey, damp strata) the naphtha would accumulate in them. It is thus preserved from remote geological periods up to the present day, compressed and dissolved under the pressure of the gases which burst out in places forming naphtha fountains. If this be granted, it may be thought that in the comparatively new (geologically speaking) mountain chains such as the Caucasian, naphtha is even now being formed. Such a supposition may explain the remarkable fact that in Pennsylvania localities where naphtha had been rapidly worked for five years have become exhausted, and it becomes necessary to constantly have a recourse to sinking the new wells in fresh places. Thus from the year 1859 the workings were gradually transferred along the line running parallel to the Alleghany Mountains for a distance of more than 200 miles, whilst in Baku the industry dates from time immemorial (the Persians worked near the village of Ballaghana) and up to the present time keeps to one and the same place. It may be that the Baku beds as being of more recent geological formation are not so exhausted by nature as those of Pennsylvania, and perhaps in the neighbourhood of Baku naphtha is still being formed which is partially indicated by the continued activity of the mud volcanoes. As many varieties of naphtha contain in solution solid, slightly volatile hydrocarbons, like paraffin and mineral wax, the production of ozokerite or mountain wax is accounted for in conjunction with the formation of naphtha. Ozokerite is found in Galicia, also in the neighbourhood of Novorossisk, in the Caucasus, and on the islands of the Caspian Sea (particularly in the Tchileken and Holy Islands); it is met with in large masses, and is used for the production of paraffin and *ceresine* for the manufacture of candles and similar purposes.

As the naphtha treasures of the Caucasus are hardly broached (near Baku and near Kouban and Novorossisk), and as naphtha finds manifold uses, the subject presents most interesting features to chemists and geologists, and is worthy of the close attention of practical men.

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PETROLEUM TRADE OF NOVOROSSISK IN 1906.

The following are the quantities of various petroleum petroleum products delivered at Novorossisk from Baku and Grosny respectively, during 1906, compared to 1905:—

	From Baku. Poods.	From Grosny. Poods.	Totals. 1906. Poods.	Totals. 1905. Poods.
Kerosene ..	1,562,612	1,627,645	3,190,257	7,821,893
Solar Oil ..	—	—	—	117,769
Crude Oil ..	—	2,173,076	2,173,076	2,903,109
Residuals ..	514,147	99,521	613,668	1,197,743
Benzine ..	—	607,834	607,834	504,446
Ligroin.. ..	—	264,283	264,283	370,248
Total in 1906	2,076,759	4,772,359	6,849,118	12,915,208

The total deliveries of various products in 1905 from Baku were 7,865,378 poods, and from Grosny, 5,049,830 poods.

The shipments of petroleum products from Novorossisk during 1906, were:—

	To Foreign Ports.	To Russian Ports.	Totals 1906.	Totals 1905.
Kerosene ..	2,394,547	1,090,809	3,485,356	10,762,936
Solar Oil ..	—	—	—	436,066
Crude Oil ..	—	4,047	4,047	2,468
Residuals ..	560,062	2,095,116	2,655,178	2,212,351
Benzine ..	643,746	2,981	646,727	496,887
Ligroin ..	419,845	—	419,845	249,319
Benzine Distillate	—	—	—	340
Goudron ...	—	3,230	3,230	2,539
Total ..	4,018,200	3,196,183	7,214,383	14,162,906

AMERICAN PETROLEUM EXPORTS.

STATISTICS FOR JANUARY.

According to the official publication of the Washington Bureau of Statistics, the exports of petroleum from America from the various ports during January were as under:—

	1906. Quantities. Gallons.		1907. Quantities. Gallons.
Crude—			
Baltimore	—	.. ..	—
Boston and Charlestown	—	.. ..	—
Delaware	7,790,133	.. ..	—
New York	11,500	.. ..	1,600
Philadelphia	415,717	.. ..	6,203,724
Galveston	604,574	.. ..	1,243,570
Total	8,821,924	Total ..	7,448,894
Total value for the month, 1906..		.. ..	$519,521
,, ,, ,, 1907..		.. ..	$418,119
Naphthas—			
Baltimore	—	.. ..	300
Boston and Charlestown	—	.. ..	—
Delaware	—	.. ..	—
New York	1,087,386	.. ..	354,242
Philadelphia	4,076,584	.. ..	874,697
Galveston	—	.. ..	—
Total	5,163,970	Total ..	1,229,239
Total value for the month, 1906 ..		.. ..	$363,667
,, ,, ,, 1907 ..		.. ..	$129,760
Illuminating—			
Baltimore	3,000	.. ..	1,208,026
Boston and Charlestown	4,499	.. ..	4,542
Delaware	—	.. ..	—
New York	35,072,678	.. ..	31,952,565
Philadelphia	28,557,430	.. ..	19,156,630
Galveston	1,077,807	.. ..	1,156,123
Total	64,715,414	Total ..	53,477,886
Total value for the month, 1906		.. ..	$4,018,620
,, ,, ,, 1907		.. ..	$3,482,881
Lubricating—			
Baltimore	407,207	.. ..	344,630
Boston and Charlestown	—	.. ..	—
Delaware	—	.. ..	—
New York	10,529,178	.. ..	6,975,221
Philadelphia	6,221,960	.. ..	2,227,038
Galveston		.. ..	4,224
Total	17,158,345	Total ..	9,579,482
Total value for the month, 1906		.. ..	$1,877,064
,, ,, ,, 1907		.. ..	$1,226,152
Residuum—			
Baltimore	—	.. ..	—
Boston and Charlestown	—	.. ..	12,500
Delaware	—	.. ..	—
New York	—	.. ..	3,000
Philadelphia	3,731,344	.. ..	6,153,198
Galveston	884,003	.. ..	—
Total	4,615,347	Total ..	6,168,698
Total value for the month, 1906		.. ..	$129,899
,, ,, ,, 1907		.. ..	$196,047
Total Mineral Oils—			
Baltimore	410,207	.. ..	1,552,956
Boston and Charlestown	4,499	.. ..	45,411
Delaware	7,790,133	.. ..	—
New York	46,700,742	.. ..	39,286,628
Philadelphia	43,003,035	.. ..	34,615,287
Galveston	2,566,384	.. ..	2,403,917
Total	100,475,000	Total ..	77,904,199
Total value for the month, 1906		.. ..	$6,908,771
,, ,, ,, 1907		.. ..	$5,152,959

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PETROLEUM IMPORTS INTO YOKOHAMA.

The imports of petroleum products into the port of Yokohama during January of this year amounted to 2,759,878 gallons, and were valued at 594,825 yen, as against an importation of 1,129,642 gallons during January, 1906, at a value of 215,360 yen.

THE PETROLEUM DEPOSITS IN SAGHALIEN.

INTERESTING ACCOUNT OF A VISIT.

In a recent issue of the *Trade and Industry Gazette*, Mr. K. Tultchinsky publishes an account of a visit paid by him to one of the oil fields on the north-east coast of Saghalien.

The first news of the existence of petroleum in Saghalien was obtained from the native Tunguses, who in the seventies of the last century told a merchant from Nikolaeff, on the Amur, of wells found by them on the island full of a black liquid petroleum, to which, owing to its smell, they gave the name of "kerosene water."

Since that time not only has there been nothing done to exploit the Saghalien petroleum deposits, but even the information which is known about them is vague and far from accurate. The cause of this lies in the fact that for many years Saghalien was a convict settlement. The development of the mining, gold and petroleum industries during the last 25-30 years has been left to the Administration of Prisons, who did not favour the development of such industries, and these views led, in 1901, to the final prohibition of all private mining, gold and petroleum enterprises in Saghalien.

After the conclusion of the Russo-Japanese War the convict settlements on the Russian part of Saghalien were abolished, and the despatch of convicts thither was stopped, and so at the present moment Russian Saghalien is entering upon a new era of its existence. It may reasonably be assumed that we are on the eve of the withdrawal of the prohibition of private mining enterprise on Russian Saghalien, and in such event a vast field will be opened to capitalists to develop the coal and petroleum deposits of that remote region, the insular position of which favours the development of industries on a large scale.

At present there are in Russian Saghalien three more or less known petroliferous regions—the Urktsky district, the Nyiski district, and the Tchaivinsky district, near the bays bearing the same names, situated on the north-eastern shores of the Okhotsk Sea. The following are the oil fields of these regions—Ochinskaia, Nogalikskaia, Nabilskaia, Nutovskaia, and Boatasinovskaia. Considerable areas are covered by the oil coming up on the surface. The researches hitherto made in these localities were merely half-hearted attempts to study the Saghalien oil deposits for industrial purposes. Nevertheless, Mr. Batzevitch, a mining engineer, who visited the most northern Urktsky region as far back as 1889, concluded on the strength of the data collected by him concerning the considerable natural outcrops of oil (in one place the oil has covered up on the surface an area of 9,000 square sagenes), their great number, the influx of oil in the prospecting shafts and boreholes, the extensive deposits of kir (crude petroleum dried up by the air), that in all probability there exist more or less considerable stores of oil in the deeper strata, as there is not sufficient reason to suppose that the oil in its passage upwards through the cracks to the upper strata should not have impregnated the lower strata.

The above-mentioned phenomena observed in the Ochinsky oil field of the Urktsky region are still more strikingly apparent on the Nutovo oil field in the Tchaivinsky region, visited by the author in the summer of 1906, where there is a whole series of petroleum outcrops in the form of five large and numerous small lakes of petroleum—one of these lakes being 1,400 feet long. The deepest borehole ever drilled in the Saghalien oil field is the one laid down by Mr. Zotoff as far back as 1892 in the Nogliksky field of the Nabilsky district. It was sunk to a depth of only 450 feet. In this well two petroliferous strata were met with, but of small productivity. This, however, probably shewed that these strata were merely branches of the main petroliferous stratum.

An English geologist, who visited the Tchaivinsky district immediately before the Russo-Japanese War, in his report summarising the results of the labours of the English expedition in the autumn of 1903 in the Nutovo and Boatasinovsky oil fields, says that the petroliferous deposits of the island of Saghalien are sufficiently reliable to justify drilling on a large scale. He recommended the laying down in the Nutovo field of a borehole to be sunk to 2,000 feet, but the outbreak of war prevented the English company beginning its proposed extensive boring operations.

In view of the absence of any natural outcrops of the primary formations, which the oil deposits must follow, it will be necessary in order to avoid fruitless labour and expense to carry out preliminary prospecting by shafts, and thus determine the direction of the anticlinal folds so as to place the boreholes on the axis of the anticlinals. The difficulties of carrying out explorations of the oil deposits in this absolutely wild country are further increased by the luxurious vegetation in the form of dense forests and tall strong grass which alternate with peat bogs and moors.

The valleys which divide the eastern spurs of the northern central Saghalien mountains range apparently never dry, and represent vast morasses. It is just in these valleys that the most extensive natural outcrops of petroleum occur in the Tchaivinsky district inspected by him, and judging by the account of other people, the same applies to the other petroleum regions, namely, the Urktsky district in the extreme north, and Nyisko-Nabilsky district in the extreme south.

The author is of the opinion that careful and systematic searches are bound to reveal the existence of more numerous and larger petroleum pools in the localities situated immediately on the shores of the Sea of Okhotsk between the Urktsky and Tchaivinsky districts on the one side, and between the Tchaivinsky and Nyisko-Nabilsky districts on the other side.

All the petroliferous areas now known to exist in Saghalien have been discovered accidentally by the native tribesmen, whilst no special searches have yet been undertaken by anyone. The author, therefore, urges the necessity of taking prompt measures to develop the Saghalien oil fields, for which he predicts a great future. As proof that the small yield of oil obtained from the shallow wells and pits dug there need not discourage further efforts, the author points to the Balakhany oil field at Baku, where the output of the first hand dug wells was only a few poods, as is the case at Nutovo, Ochinskaia, and other Saghalien oil fields, whilst when the business was taken up by Nobel and several deep boreholes drilled, the last one produced a spouter which yielded millions of poods of oil, and made the Baku oil fields famous all the world over. Saghalien is now awaiting its Nobel.

AMERICAN OIL NOTES.

To Drill for Gas.—The directors of the North Side Gas Co. have decided to commence drilling operations in the Ferenbraugh field, where the prospects are said to be highly promising.

No Sunday Trade.—An agitation is gaining ground in Sykeston, Canada, against the pumping of oil wells on the Sabbath, and a movement is now on foot to bring the parties who allow the working of oil wells, before the courts.

Promotion.—At a recent meeting of the directors of the Prairie Oil and Gas Co., held at Independence, Mr. D. C. Stewart, who has been in the service of the company for a quarter of a century, was promoted to be the assistant superintendent.

The Kansas Fields.—It is reported that there is less drilling going on in the Kansas oil fields than at any time during the past four years. In the gas belts, the industrial plants are drilling a few wells so as to keep up the gas supply, but for oil there is practically no drilling taking place at all.

Record Drilling.—One of the quickest bits of drilling on record in Texas is now reported from the Powell field, east of Corsicana. Here, according to the *Well Drillers' News*, a well was started and completed in 36 hours, and is now a producer. The depth drilled was 750 feet, a rotary rig being used.

How Hitchcock's Regulations Work.—Prevented by Secretary Hitchcock's pipe line regulations from getting production in Indian Territory, the National Refining Co. has recently purchased the Spurlock Petroleum Company's oil property near Peru, Kansas. The daily production is about 350 barrels, coming from 24 wells.

Through the Panama Pipe Line.—The *Oil City Derrick* states that the Californian oil which is being pumped through the Panama pipe line recently laid down by the Union Oil Co. of California, is finding a ready sale on the Atlantic coast. The oil is for fuel purposes, and is entering into competition with the oil from Texas and Louisiana.

The Ohio Oil Company.—It is stated that the Ohio Oil Co. has now improved its facilities for handling oil, and is now running about 30,000 barrels per day. The company's production is placed at about 40,000 barrels daily. A large portion of the territory is still undeveloped, so the present production can be materially increased when circumstances permit.

Gulf Company Organised.—The Gulf Oil Corporation has been incorporated in New Jersey with a capital of $15,000,000 in shares of $100 each and an authorised issue of $15,000,000 first mortgage and collateral trust 6 per cent. gold bonds. This new concern will unite the J. M. Guffey Co. and the Gulf Refining Co., according to the plan already announced in the Review, and will build the pipe line planned by these companies.

American Drillers Leave for Roumania.—A number of well-known drillers in the Gulf Coast region have recently left for Roumania, where they are to assist in popularising the rotary system of drilling in the Prahova district. We gather from the *Oil Investors' Journal* that the party has been engaged to drill for the Apostolache Petroleum Co. A Parker rotary outfit has been shipped, and will arrive in Roumania for the use of the party at Prahova.

More Refineries in the Air.—There have been many stories of late of refineries to be built in the Mid-Continent fields, but somehow or other the majority of the schemes never mature. The latest scheme is for the erection of a large refinery and the laying down of a pipe line from East St. Louis to the Illinois oil field. The name of the company which has signified its intention of carrying on the work is the Mid-Continent Oil Refining Co., and its capital is placed at $5,000,000.

The Ohio Company's New Line.—The new 12-inch pipe line, recently built by the Ohio Oil Co., just west of Hartford City and extending from the Indiana oil field to Casey, Illinois, is now in operation.

The Allegany Pipe Line.—The annual meeting of the shareholders of the Allegany Pipe Line Co. has recently been held, at which it was decided to distribute a dividend of 50 per cent. from the accumulated profits for the past four years.

In Lawrence County.—The Big Four Oil Co., which is operating in the Lawrence district of the Illinois field, has recently drilled a well that is flowing at the rate of 500 barrels daily. This company has already drilled a number of wells in Lawrence county, where it holds leases upon 1,600 acres.

The Mexican Petroleum Company.—We have it on the authority of the *Oil, Paint and Drug Reporter* that a company under the above title has recently been registered in New York with a capital of $50,000,000. We should imagine that a few extra figures have been attached to this capital figure by the compositor.

The Caddo Field.—Development work has now started in thorough earnest in the Caddo field of North-west Louisiana. This is the first field since the bringing in of the Humble surprise, that has claimed the undivided attention of operators. Wells are now being drilled as quickly as possible, though the locations cover a wide area.

Important Canadian Strike.—A communication from Chatham, Canada, dated February 14th, records a wonderful strike that has been made in Romney township. When a well was drilled to a depth of 230 ft. the tools disappeared, and a gush of oil followed, flooding acres of territory. It is said that thousands of barrels of oil were lost.

To Whom?—The property of the Elmendaro Oil Co., near Collinsville, and comprising 640 acres in eight leases, on which up to the present five producing wells have been drilled, has been transferred to one of the companies which is to build a pipe line from the Mid-Continent fields to the Gulf. The impression is that the Texas Co. has bought the property.

The Mid-Continent Fields.—The situation in the Kansas and Indian Territory fields is being relieved to an appreciable extent, consequent upon the new openings found for the oil. The report of the Prairie Oil and Gas Co. shews that for the first three three weeks of February the runs made a daily average of over 80,000 barrels, an excess of over 2,000 barrels daily when compared with the runs during January.

A Successful Year's Working.—The Union Natural Gas Corporation had a record year during the past twelve months. According to the annual report the company, which operates chiefly in Ohio, shews that the gross earnings amounted to $2,990,925, as compared with $2,618,741 for the twelve months previous. This was due to the increased number of consumers of natural gas. During the past year the company laid an additional 130 miles of pipe.

Cost of Drilling Increases.—As the result of a meeting of the boring contractors at work in the Illinois fields, it has been decided to increase the cost of drilling from $1·50 to $2 per foot. This decision has been arrived at because the majority of the wells drilled up to the present in the Riley field are known as "wet holes." In them, water has been encountered at a depth of 50 feet, and the consequence has been that subsequent drilling is very slow, casing having to be lowered from that point up to the 1,400 feet mark. There is no doubt that the increase in the cost of drilling will tend to minimise new work in the field, and generally retard development.

PETROLEUM IMPORTS INTO THE UNITED KINGDOM DURING FEBRUARY.

THE SHIPMENTS INTO VARIOUS PORTS.

Herewith we give the various shipments of petroleum products into the ports of the United Kingdom during the month of February. The total quantity of products imported during the month was 22,203,660 gallons, as against 28,017,200 gallons for the first month of the year. It has to be recollected, however, that the month is the shortest of the year, having three days less than its predecessor, and this, to a very large extent will account for the deficit. The figures are as under (in gallons):—

	Lubricating.	Illuminating.	Residuals.	Benzine.	Gas.	Other Products	Fuel.
Barrow	—	143,030	—	425,600	—	—	—
Belfast	1,310	—	—	—	—	—	—
Bristol..	78,840	1,851,900	—	—	127,400	28,400	—
Dublin	—	429,080	—	—	—	—	—
Dundee	—	—	—	—	—	1,200	—
Goole	1,380	—	—	—	—	—	—
Glasgow	247,690	—	4,000	—	—	5,000	—
Grangemouth	12,320	23,200	—	—	—	—	—
Grimsby	1,490	—	—	—	—	—	—
Hull	177,240	1,037,700	—	3,400	—	3,600	—
Leith	13,720	95,920	—	—	—	—	—
Liverpool	1,550,850	288,530	30,790	—	858,530	14,320	—
London	724,370	3,856,190	—	2,490,500	4,447,520	21,100	40
Manchester	516,420	649,360	—	—	—	11,400	—
Middlesboro'	5,520	—	—	—	—	—	—
Newcastle	14,160	480	—	—	—	—	—
Plymouth	—	536,230	—	—	—	—	—
South Shields	—	368,090	—	—	—	—	—
Sunderland	—	1,097,560	—	—	—	—	—
Swansea	8,280	—	—	—	—	—	—
Totals	3,353,590	10,377,270	34,790	2,919,500	5,433,450	85,020	40

THE ROMANA-AMERICAN COMPANY AND THE ROUMANIAN PETROLEUM INDUSTRY.

The *Moniteur du Petrole Roumain* in its latest issue publishes the following statement made by the Romana-American Co. in explanation of its position in connection with the differences which have arisen between it and the Roumanian refiners' cartel:—

"The number of refineries having multiplied, the demand for crude oil has also naturally increased. As a result of this competition the price of crude oil has gone up.

"This increase in the price of crude oil cannot in any way prejudice the interests of the large refineries such as the Steaua Romana, who are at the same time also producers of crude oil and for the most part refine their own crude oil. But this rise in prices is a great boon to small producers who cannot have their own refineries. Moreover, these high prices will inevitably encourage the increase in the number of small producers, which is everybody's ideal.

"We should have understood had the public took alarm if the refiners had combined to keep down the price of crude oil, but it is incomprehensible that we should be accused of the fact of having contributed to a rise in the price of crude oil!

"As regards refined oil, it is true that the Romano-American Co. sells refined oil in the country one franc cheaper, namely, at 23 francs (including 12 francs Government tax) per 100 kilos instead of 24 francs, at which it was sold previously; but since the refineries in the cartel have lowered the price to 22 francs, the Romano-American Co. sells also at the same price of 22 francs.

"If this competition has had as its effect the lowering by nearly 10 per cent. the price of an article of the first necessity such as illuminating oil, public opinion should bless it and not become alarmed at it.

"But it is pretended that this lowering of price conceals some hidden objects.

"The proof that there never was and there is not anything hidden about it, is that in June last the Romano-American Co., having been invited to join the petroleum refiners' cartel for sale on the home market, agreed to join the cartel. If this did not come about it was because another refinery, and not the Romano-American Co., had refused to join the cartel.

"These are facts which no one in the petroleum refining world is ignorant of, and of which there are also written proofs in the archives of the Romano-American Co.

"In any case, we can understand that the refiners should be upset when certain firms withdraw from the cartel, but this should not arouse the anger of the consuming public.

"Another proof that the Romano-American Co. is not pursuing any hidden aims, is the manner in which it has made use of its liberty to fix its selling price.

"It must not be forgotten that business establishments and manufacturers cannot cause a fall in prices just to amuse themselves.

"The prices of manufactured products in every serious establishment must always preserve a logical relation to the price of raw materials."

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RUSSIAN AND ROUMANIAN NOTES.

Another Strike.—On March 8th a strike of workmen broke out at the Bebe-Aibat station of the Electric Power Co.

Strikes Settled at Last.—A telegram from Baku, dated March 7th, announces that all the strikes at the Baku oil fields has been settled, and work has been everywhere resumed.

Drawn to Roumania.—Mr. Lucas, (banker), of Paris, Mr. Caton Simon (engineer), and Mr. D. M. Leoneanu, have formed a company with a capital of 200,000 francs, for the purpose of exploiting petroliferous land in Roumania.

Roumanian Consumption.—The consumption of petroleum products in Roumania in January was:—Illuminating oil, 3,821 tons; lubricating oil, 282 tons; benzine, 47 tons; residuals, 22,628 tons; paraffin wax, 43 tons; coke, 26 tons.

Strike Succeeds Strike.—A telegram from Baku dated the 5th March announces that the strike has terminated on the properties of Mirzoeft, Mantascheff, and the Aramazd Companies, but a fresh one has broken out at the Moscow-Caucasian Co.

The Mantascheff Case Oil Works.—The Mantascheff case filling works at Batoum re-started work on the 7th. Part of the workmen have, however, again gone out on strike, in consequence of some long standing dispute with the firm, and so the loading of ships has been stopped temporarily.

Roumanian Prices Steady.—The price of crude oil in Roumania remains steady at 40 francs per ton, which is considered the final point of the advance. The production of crude oil has increased somewhat, as a result of the completion of several wells at Bustenari and Campina.

Output of the Roumanian Refineries. — The following was the output of petroleum products by the Roumanian refineries in January; – Benzine, 8,255 tons; illuminating oil, 14,935 tons; lubricating oils, 12,099 tons; residuals, 25,924 tons; and coke, 16,330 tons. The quantity of crude oil treated at the refineries in January was 25,924 tons.

Operations Commenced.—The Grigori Benenson Industrial and Trading Co. has commenced operations. The head office is in St. Petersburg. The first directors are: G. I. Benenson, S. B. Benenson, and M. M. Benenson. Candidates for directors are: V. I. Balabanoff, and M. L. Eisenstein. Mr. G. I. Benenson has been elected managing director.

Shall the Russian Export Freight Rates be Lowered?—A commission, consisting of representatives of the petroleum industry and of the Russian railways, and having as its object to consider the question of the possibility of lowering the railway rate for export kerosene, began its deliberation on the 12th of March. Mr. G. I. Shaposhnikoff, member of the Tariff Committee, will preside.

The Moreni Fields.—The production in the Moreni oil fields during January amounted to 20,103 tons, divided among the different firms as follows:—Regatul Roman Co., 13,840 tons; Romano-American Co, 3,693 tons; Messrs. Pleyte and Co., 2,570 tons. The production at Gura Ocnitza amounted to 2,043 tons, of which 1,820 tons were obtained by the International Co. The output of the minor fields in the Dambovitza district, such as Glodeni, Colibasi, etc., amounted to 477 tons.

A Bucea Fountain.—On February 19th, at noon, well No. 118 of the Steaua Romana at Bucea, near Campina, broke out in violent eruption. The oil was thrown out to a great height, and scattered by the wind, it came down to the ground in the form of rain, and was collected in the temporary reservoirs provided for the purpose. These reservoirs were quickly filled up, and at 6 p.m. on the same day the eruption ceased after producing a considerable quantity of paraffinous oil. This borehole was started last summer, and has now a depth of about 300 metres. The eruption took place from pipes of 12 inches diameter.

The Akhverdoff Company is re-starting exploitation of its old borehole on plot No. 38 at Grosny, and is also laying down a second well.

The Steaua Romana's New Commercial Manager.—Mr. Günther, formerly member of the firm of Carissy, has been appointed commercial manager of the Steaua Romana.

A Prolific Baicoi Strike.—Well No. 1, of the Trajan Co., at Baicoi, has struck oil in abundant quantity. Well No. 2 of the same company in the same field is also on the point of becoming productive.

Stocks in Roumania.—The stocks of petroleum products at the Roumanian refineries on the 1st of February were:—Benzine, 21,830 tons; illuminating oil, 51,858 tons; lubricating oil, 18,177 tons; residuals, 42,813 tons; paraffin wax, 33½ tons; coke, 9½ tons.

Competition Lowers Prices.—The petroleum refiners forming part of the Roumanian cartel have, in face of the competition offered by the Romano-American Co, decided to lower the price of illuminating oil from 24 to 22 francs per 100 kilos (including 12 francs Government tax).

Transport of Residuals.—Messrs. Nobel Bros. have given out their contracts for the transport of residuals from Baku to Astrakhan during the coming navigation to the following firms:—Lboff, 12,000,000 poods; Screpinsky, 9,000,000 poods; and Kulikoff, 5,000,000 poods. The freight is to be 3 copecs per pood; leakage and fuel to be borne by the Shipowners.

At Grosny.—The executors of Maximoff, operating at Grosny, have started a second borehole on the plot No. 15 at the extreme eastern end of the oil fields, and propose to sink it to 2,940 feet. They are also laying down a second borehole and are re-starting exploitation of their first borehole on their other eastern plot.

The "Naphta" Company, formed at Antwerp to take over the property of Mr. V. Grigorescu and Vladescu in Bustenari, has now been definitely constituted. The directors are:—Mr. Alfred Eyben, Vasile Grigorescu, Emile Van der Bemden, Vincent Claes, Christian Dinopol, Albert de Curte and Emile Burean. The Roumanian Minister has granted permission to the new company to have a registered office in Roumania.

Contracts have now been entered into for carriage of oils to Astrakhan and up the Volga during the coming period of navigation. The following freights have been fixed:—Baku to 12 ft. roadstead, 1 copec per pood, fuel for account of shipowners; Baku-Astrakhan, 3¼-3½ copecs. The river freight contracts will be concluded at the end of March (o.s.)

A New Roumanian Company.—A syndicate has been formed in Ploesti with a capital of 2,000,000 francs. The founders are Mr. Bernstein, engineer, of Berlin; Mr. Kayser, of Hanover; and Mr. Demuth, engineer. The last-named gentleman has acquired lands at Bustenari and Cornetu Cricov. Orders have been placed for boring materials. The syndicate will ultimately be transformed into a joint-stock company.

A Welcome Step.—The Roumanian Minister of Finance has submitted to the Roumanian Parliament a modification of the law for taxation of petroleum to exempt from the tax benzine intended for motor cars. It must be rectified, and of a specific gravity not exceeding 0·720 at 15° C. The law, as it stands, exempts from the tax benzine used for oil engines, but requires it to be denatured. The substance used for denaturisation, however, renders the benzine unfit for use in the more delicate engines of motor cars. The proposed modification is intended to remove this difficulty, whilst the stipulation that it must be rectified, and of a gravity not exceeding 0·720 is to prevent it being used as an illuminant, or for the extraction of illuminating oil.

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Hon. Mem. Am. Phil. Soc.; Hon. Mem. Imp. Russ. Tech. Soc.; Adviser on Petroleum to the Admiralty and Home Office; Consulting Adviser to the Corporation of London under the Petroleum Acts; Adviser on Petroleum Transport to the Thames Conservancy.

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A Practical Handbook on the Exploration, Exploitation, and Management of Russian Oil Properties. By A. BEEBY THOMPSON, A.M.I.M.E., late Chief Engineer and Manager of the European Petroleum Co.'s Russian Oil Properties. About 500 pp., with numerous Illustrations and Plates.

London: Crosby Lockwood & Son, 7, Stationers' Hall Ct., Ludgate Hill.

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SATURDAY, MARCH 16TH, 1907.

WHAT THE STANDARD OIL COMPANY HAS DONE FOR THE PETROLEUM INDUSTRY.

> "At last the Standard Oil Co. has been brought to the bar of justice, and the hopes of the whole of the American commercial community is that this great corporation will be ousted out of existence."—*Vide* the Daily Press.

THERE are sections of the American press to which no statement calculated to injure the Standard Oil Co. is too libellous to utter or too lying to publish, but we do hope that our more truthful English press will seriously pause, ere it again gives publicity to such false assertions as those quoted above.

The agitation which is now being waged with all possible vehemence in the American courts against the Standard Oil Co. is of a much greater interest to everyone concerned in the general welfare of the petroleum industry throughout the world than may appear to be the case at first sight. We do not for a moment suggest that the agitation will succeed—in fact it is a foregone conclusion that it will ignominiously fail—yet the present moment is opportune to look at the immense work of this great organisation in the light of facts, and then judge for ourselves the serious step which the American Government is taking in attempting to minimise commercial liberty, and impede the hands of industrial progress.

We will be brief and pointed, for space does not permit a deep dive into the whole of the great and far-reaching results achieved by the Standard Oil Co., which have done so much to bring the trade of petroleum production and distribution into a profitable and thriving industry all the world over. So far as the Standard Oil Co. is concerned with America we need say little more than that it has been its pioneer, and to-day forms its very life and soul. From ocean to ocean its network of pipe lines takes care of the production of 10,000 producers from regions scattered all over the States, while its perfect organisation enables it to purchase the crude at values which otherwise would be absolutely impossible. The small producer in America is well aware of the remarkable concentration of thought and capital which has been required before it was feasible for his crude oil to be transported from the well's mouth to the far away refineries at Whiting, or even those of more Eastern situation, but what appeals to him the more is that he should receive a price for his product which makes oil producing exceedingly profitable. In this regard it is very curious to find that though the opponents of the Standard would have us believe that this powerful amalgamation of interests is grinding down the producer until he can scarcely afford to live at all, not one particle of evidence has been brought forward from the large army of small producers to substantiate the contentions put forward. The truth is that the average American producer selling to the Standard is well contented with his lot, and he cares little for anything else so long as the Standard offers to buy the whole of his oil at a profitable figure.

Here we have one instance of the absolute untruthfulness of the report of the Inter-State Commerce Commission, which body has gone not a little way in arousing popular prejudice against the Standard, but the portion of their report which concerns us most is that which refers to the subject of the Standard and European competition. The report unblushingly states: "The Standard's motto has been the destruction of competition (in Europe) at any cost, and this policy has been perused without much reference to decency or conscience."

It is perhaps in England that one is best able to form an opinion as to the great good brought about by the appearance and operation on the market of the English branch of the Standard. Prior to its arrival, the petroleum trade of this country was of quite secondary importance, the barrelled oil which arrived being the subject of much stock exchange speculation ere it reached the hands of the consumer. Needless to say, the prices were very inflated as compared with those of to-day, but one of the reasons for this was the absence of any proper system of distribution. The Anglo-American Oil Co., however, soon got to work with that assiduity characteristic of its parent amalgamation in the United States, and in an incredible short time we possessed in these islands a system of oil distribution which ranked (as indeed it does still) as second to none in any country of the world. The distribution of oil and its importation became an important branch of commerce, and the consumer was immediately able to enjoy the pure oil light at the lowest possible cost. But, far from the contention of the Inter-State Commerce Commission's report, competition was not destroyed. On the contrary, a healthy spirit of rivalry was created—rivalry which has continued until the present day, and which bids fair to last for all time. What position the petroleum trade of this country would have been in to-day had not the Standard Oil Co. opportunely entered the field, none can tell, but one thing is certain, and that is, the oil trade of England would not have been such an important branch of international commerce as it is to-day, nor would the use of oil have been so popular on every hand. Such an organisation as the Americans created in this country necessitated the sinking of an immense amount of capital—£1,000,000 at least—but the aims justified the means, for this country's oil business was thereby placed upon the sound and commercial basis upon which it now rests.

In Germany also, the advent of the Standard Oil Co. brought about a condition of things which could not otherwise have prevailed. There was no proper distributing system, and those firms interested in the petroleum trade in that country waged an unending battle one against the other, while the absence of an organsation resulted in the consumers of petroleum products being penalised by having to pay excessive prices for their oil. The Standard, however, altered all this, and to-day in Germany, thanks to its sheer perseverance, American oil claims about 80 per cent. of the country's petroleum trade—a fact which must have been of inestimable benefit to the American producer, since it means that American oil now finds consumption abroad in practically unlimited quantities.

The same thing, though in a less proportionate extent, applies to Italy, while in Roumania, it is still fresh in the minds of our readers how the Standard had almost of necessity to take an active interest in those fields in order to prevent the industry being carried on at a loss - a misfortune which would be bound to re-act upon the American crude oil prices. Production was increasing very rapidly, and as over-production without adequate organisation always spells ruin all round, the Standard went to Roumania, and by the exercise of a guiding hand, was able to avert what might have been disaster, and keep the Roumanian industry in the healthy state in which it lives to-day.

France stands out very prominently as the Continental country in which the Standard has not obtained a foothold, for there the local petroleum refiners are protected by the State in regard to their refined products. The Standard, however, has created a very large market for crude oil, as a consequence of which the American petroleum producers naturally benefit. The policy of the Standard in regard to France is worthy of all praise, for finding the refining industry already established there, they contented themselves by supplying the necessary crude oil for the refiners.

We are certainly able to say without any egotism, that had the Standard Oil Company's energies in the past not had full scope, the American producers and the American petroleum industry as a branch of commerce would to-day have been much the poorer. That being so, we cannot for one moment understand the attitude of the American Government which is quite openly seeking to destroy the supremacy of American petroleum abroad by the disintegration of the corporate organisation of the Standard Oil Co. If the policy of the Standard Oil Co. up to the present has not been such as ought to command the respect and the strongest support of the American Government, then we ask with all seriousness, where is the business concern which is looked upon with favour by American legislators?

THE GROSNY PETROLEUM INDUSTRY DURING 1906.

The total production of crude oil in the Grosny oil fields during 1906 amounted to 39,594,100 poods, which is less than in 1905 by 3,479,634 poods. The decline represents exactly one month's output, and is explained by the fact that in 1906 there were only eleven working months at Grosny.

Consequently in 1906 the production was equal to that of 1905, if we leave out of account the month of the strike. The second half of the year yielded a somewhat smaller production than the first half, namely, 19,585,703 poods, against 20,008,397 poods.

The production of the different companies in the first and second halves of the year was as under :—

	First half of 1906. Poods.	Second half of 1906. Poods.
Akhverdoff Co.	11,286,100	10,135,616
Spies Co. (including the properties of the Grosny Oil Co.)	3,218,580	3,247,449
Anglo-Russian Maximoff Co.	2,326,300	2,608,000
Kasbeck Syndicate, Ltd.	622,450	1,151,730
North Caucasian Oilfields, Ltd.	886,775	782,005
Tcheleken-Daghestan Co.	502,181	578,845
Russian Standard	422,599	334,664
Moscow Co.	231,150	245,000
Caspian and Black Sea Society	230,125	171,770
St. Petersburg Co,	143,109	169,200
James MacGarvey	74,646	79,940
Executors of Maximoff	9,150	44,000
Kholodovsky	32,126	21,743

The decline in the production of the Akhverdoff Co. between the first and second halves of the year falls entirely on the production by spouters, which in the first half was 5,472,500 poods against 3,671,815 poods in the second half.

The properties of the Grosny Oil Co., now worked by the Spies Co., have by themselves produced in the first half-year 197,777 poods, and in the second half-year 253,275 poods.

The great increase in the output of the Kasbeck Syndicate is due to the opening up of a new plot, which brought the Syndicate up to the fourth place among the Grosny producers instead of the fifth, which it occupied in the first half-year.

The production of the various firms for the whole of 1906 compared to 1905 was as under :—

	1906 Poods.	1905 Poods.
Akhverdoff Co.	21,421,716	21,352,100
Spies Petroleum Co., Ltd.	6,466,029	6,880,000
Anglo-Russian Maximoff Co., Ltd.	4,934,300	5,630,000
Kasbeck Syndicate, Ltd.	1,774,180	1,160,000
North Caucasian Oilfields, Ltd.	1,668,780	1,990,000
Tcheleken-Daghestan Co.	1,081,026	920,000
Russian Standard	757,263	1,045,000
Moscow Co.	476,150	570,000
Caspian and Black Sea Society	401,895	770,000
St. Petersburg Co.	312,300	470,000
James MacGarvey	154,586	1,008,500
Executors of Maximoff	53,150	—
Kholodovsky	53,869	170,000
Grosny Oil Co.	—	780,000
Spies, Stucken and Co.	—	77,000
Alkhan-Yurt Co.	—	11,200

It will be observed from the above figures that the leading firm—the Akhverdoff Co.—has maintained its production, and even slightly increased it. The Spies Co. and the Anglo-Russian Maximoff Co. have experienced a reduction, but proportionately small. The Kasbeck Syndicate has achieved a great increase, consequent upon the greater drilling activity resulting from the acquisition of an interest in it by the Deutsche Bank. The largest decreases have occurred in the case of the smaller producers, such as the Russian Standard, James McGarvey, Caspian and Black Sea Society, etc.

The Grosny Oil Co., which in 1905 produced 780,000 poods, was in 1906 included in the Spies Petroleum Co., Ltd. If we take this fact into account, we will find that production on the Spies Co.'s old properties shewed a larger decline than is at first apparent.

The Alkhan-Yurt Co. has disappeared from the list of producers, having been taken over by the Executors of Maximoff.

THE SOUTH-EASTERN DEVELOPMENT SYNDICATE, LIMITED.

The South-Eastern Development Syndicate, Ltd., has recently been registered with a capital of £10,033 in 10,000 "A" and 33 "B" shares of £1 each. The objects are to search for, obtain, and work minerals, mineral oils and natural gas of all kinds, by boring, sinking, drilling, or otherwise, to negotiate for and obtain any necessary rights, to acquire, develop, and turn to account mines and properties, and to carry on the business of miners, metallurgists, oil refiners, manufacturers of gas and liquid fuel, and colliery owners. The signatories are :—

	Shares.
Sir Thomas H. C. Troubridge, Bart., 66, Gloucester Gardens, London	8 "B"
Lady Troubridge, 66, Gloucester Gardens, London	1 "B"
G. J. Cross, Napier House, Barking Road, E.	9 "B"
J. G. Bulteel, 31, Threadneedle Street, E.C.	6 "B"
Lord Marcus T. De la Poer Beresford, Bishopsgate, Englefield Green	9 "B"
Mrs. M. Bulteel, Brook Lodge, Cheapside, Ascot	50 "A"
H. Colinton, 26, Austin Friars, E.C.	500 "A"
W. Clarke, 31, Threadneedle Street, E.C.	300 "A"
S. Brunton, 2, Threadneedle Street, E.C.	350 "A"
C. C. Clarke, Stock Exchange, E C.	50 "A"
H. Fletcher, Stock Exchange, E.C.	100 "A"
Lionel Roberts, Stock Exchange, E.C.	100 "A"
S. Mure Fergusson, Stock Exchange, E.C.	50 "A"
L. M. Higham, Stock Exchange, E.C.	300 "A"
A. Paull, Stock Exchange, E.C.	250 "A"
E. H. Milkiewicz, 31, Threadneedle Street, E.C.	50 "A"
C. H. Clark, Stock Exchange, E.C.	100 "A"
C. W. E. Duncombe, 4, Albemarle Street, W.	100 "A"
A. G. Coke, 31, Threadneedle Street, E.C.	50 "A"
H. D. Solomon, 31 Threadneedle Street, E.C.	250 "A"
Harry K. Paxton, Stock Exchange, E.C.	200 "A"
Colonel the Hon. H. A, Lawrence, Salisbury House, E.C.	100 "A"
B. Fitzgerald, 19, Throgmorton Avenue, E.C.	200 "A"
G. A. Prentice, Salisbury House, E.C.	250 "A"
E. J. Mills, 31, Threadneedle Street, E.C.	500 "A"
L. Bulteel, 7, Drapers' Gardens, E.C.	250 "A"
W. A. Fraser, 2, Copthall Court, E.C.	100 "A"
C. H. Winn, 31, Throgmorton Street, E.C.	200 "A"
A. Cahn, 18, Austin Friars, E.C.	200 "A"
J. R. Gelder, 22, Austin Friars, E.C.	100 "A"
C. A. Greenfell, 4, Great Cumberland Place, W.	200 "A"
Baron Max de Tuyll, Ashleigh, Virginia Water	250 "A"
P. A. Wickes, 31, Threadneedle Street, E.C.	100 "A"
W. J. Joicey, Sunningdale Park, Sunningdale, Berkshire	300 "A"
E. E. Sawyer, M.A.M.Inst.C.E., 20, Devonshire Terrace, W.	50 "A"
Prince Alexis Dolgorouki, 46, Upper Grosvenor Street, London (by his agent, J. G. Bulteel)	300 "A"
F. S. Brady, 31, Threadneedle Street, E.C.	100 "A"

There will be no initial public issue. First directors (not less than two nor more than seven): Colonel the Hon. H. A. Lawrence, E. E. Sawyer, and Lord Marcus T. De la Poer Beresford. Qualification, 50 "A" shares or one "B" share. Remuneration as fixed by company. The registered offices are at 3, Great Winchester Street, E.C. [We refer to this syndicate in our Editorial Notes.—Ed., *P.R.*]

BATOUM PETROLEUM EXPORTS IN JANUARY.

The export trade of petroleum from Batoum during January was again unsatisfactory, and amounted to not more than 2,883,000 poods. The shortage again falls to the share of kerosene in bulk, which in January was in small demand, notwithstanding that a cargo of 320,000 poods was quite unexpectedly shipped to the Far East. There are no changes to record in the manufacture and shipments of case oil. The shipments of kerosene cases during the month amounted to 693,000 poods, whilst of kerosene in bulk there were shipped 1,137,000 poods. Of other products the lubricating shipments were in the usual proportions, namely, about 30 per cent. of the total shipments; of the lubricating oils, 52,000 poods were shipped in barrels.

The following are the figures of the arrivals of oils from Baku and shipments from Batoum during January, and stocks at Batoum on the 1st of February, 1907 (in poods): –

	Arrivals in January.	Shipments in January.	Stocks on 1st Feb. (o.s.)
Refined Kerosene ..	2,560,000	1,830,000	4,574,000
Kerosene Distillate ..	—	—	175 000
Solar Oil	83,000	—	340,000
Machine Oil	398,000	474,000	881,000
Spindle Oil	96,000	138,000	86,000
Cylinder Oil	17,000	28 000	22,000
Vaseline Oil	—	132,000	86,000
Lubricating Oil Distillate	1,000	89,000	16,000
Residuals	187,000	192,000	221,000
Total	3,342,000	2,883,000	6,401,000

Of the total quantity of kerosene delivered at Batoum from Baku during January 34,000 poods came in tank waggons all the way from Baku, and 2,526,000 poods were pumped through the pipe line.

Although the arrivals of kerosene exceeded the shipments by more than 700,000 poods, it was nevertheless far below the normal figure, the putting of the loading of several steamers for the early part of February has brought the stocks of kerosene at the end of the month up to 4,500,000 poods.

The distribution of the exports among the different consuming countries shew a great deviation from the normal conditions. For instance, to England there was nothing exported at all except 200 barrels of lubricating oil, which is an unprecedented fact; to France there were shipped 145,000 poods, to Belgium and Holland 351,000 poods. The exports to German ports were steady and amounted to 434,000 poods. Bulk shipments to Alexandria were very brisk, aggregating, together with case oil, 378,000 poods. In addition there was shipped 60,000 poods to Tunis. To Odessa and Vladivostok there were shipped 181,000 poods. To Turkey and the Balkan States, 664,000 poods.

* * *

MOVEMENTS OF GROSNY AND BEREKEI OILS AT PETROVSK STATION DURING 1906.

The following were the movements of Grosny and Berekei petroleum products in 1906 as compared with those of 1905:—

	Poods. 1906	Poods. 1905
Stock on 1st January	405,258	8,728
Delivered during the year—		
From Grosny	4,462,357	3,778,502
,, Berekei	35,669	277,703
Total	4,498,023	4,056,205
Shipments during the year—		
To Astrakhan	4,499,315	3,240,912
,, Baku	—	230,127
Used locally	250,988	188,636
Total	4,750,303	3,659,675
Stock at end of year	152,978	405,258

* * *

PRODUCTION OF ENGLISH COMPANIES IN RUSSIA.

Baku Russian Petroleum Co., Ltd.—The production for the week ended 2nd March was 235,000 poods, or 3 788 tons; and for the week ended March 9th was 247,000 poods, or 3,982 tons.

Russian Petroleum and Liquid Fuel Co., Ltd.—The production for the week ended March 3rd was 237,000 poods, or 3,281 tons; and for the week ended 10th March, 180,000 poods, or 2,902 tons.

Spies Petroleum Co., Ltd.—The output for the week ended 3rd March was 131,480 poods, or 2,120 tons; and for the week ended 24th February, 113,800 poods, or 1,835 tons.

The European Petroleum Co., Ltd.—The production for the week ended 3rd March was 130,197 poods, or 2,099 tons; and for the week ended 10th March was 126,255 poods, or 2,036 tons.

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MISCELLANEA.

PROGRESS OF THE ROUMANIAN PETROLEUM INDUSTRY.

We are indebted to our excellent contemporary the *Moniteur du Petrole Roumain* for a number of interesting details as shewing the remarkable progress of the Roumanian petroleum industry during the past decade, these particulars being forwarded to us in advance of their publication in the ordinary way. During the year 1897 the total crude production in Roumania amounted to 110,000 tons, and represented a value of 4,400,000 francs. Five years later the production reached 270,000 tons, and was valued at 10,800,000 francs, while for last year the production was over 880,000 tons, and the value over 39,900,000 francs. The total value of the capital last year engaged in the Roumanian petroleum industry was about 185,000,000 francs, and the value of the crude oil received reached 22 per cent. of this.

◆

DEATH OF A WELL KNOWN AMERICAN OIL MAN.

Death has again entered the ranks of old-time American oil men, and called one who was universally esteemed, in the person of Mr. James Randolph Goldsborough. From his boyhood, the deceased gentlemon was closely identified with the American oil industry, but he was best known for the prominence he took in the American Producers' Protective Association in 1887, organised for the purpose of curtailing the excessive production of crude oil, and reducing the surplus stocks. He was made secretary of this organisation, and assumed charge of all the details connected with the arrangement with the Standard Oil Co., whereby 6,000,000 barrels of oil were set aside to be sold for the benefit of all oil well workers thrown out of employment, and the oil producers, who abided with the terms of the shut-down agreement.

◆

IMPORTANT DEAL OF PROPERTY IN THE ILLINOIS FIELDS.

Our own American correspondent records the completion of a large and important transfer of oil property in the Illinois field where Messrs. Benedum and Trees have sold the remainder of their holdings in Clarke, Crawford, Lawrence and Wasbach counties to Mr. T. N. Barnsdall, a well-known oil man who last year purchased half Messrs. Benedum and Tree's holdings. The property transferred consists of no less than 48,000 acres of land, upon which at present there are 100 producing wells, yielding between 6,000 and 7,000 barrels per day. Forty of the farms embraced in the deal have been tested and found to be petroliferous, but not yet developed. It is believed that the production of the land can easily be brought up to 15,000 barrels per day, but it will take years to thoroughly develop all the leases acquired. This deal is the largest that has taken place in the Illinois field.

DELIVERIES OF PETROLEUM PRODUCTS FROM BAKU IN 1906.

The following were the quantities of various petroleum products despatched from Baku during 1906 as compared with those of 1905:—

	1906. Poods.	1905. Poods.
Illuminating oil	71,528,834	73,672,783
Lubricating oils	15,114,682	10,666,081
Residuals	204,278,693	265,001,682
Crude oil	33,331,587	24,134,998
Other products	1,501,711	1,257,136
Total	325,755,447	375,732,680

Divided, according to mode of transport, the deliveries in 1906 were:—

	1906.	1905.
By Transcaucasian Railway—		
To Batoum	34,952,533	29,226,203
To other places in the Caucasus	16,899,857	13,349,993
By Baku-Petrovsk Railway	2,538,516	1,973,424
By Sea—		
To Astrakhan	249,680,856	303,874,843
To Petrovsk	5,353,725	10,229,835
To Transcaspian province	9,041,370	9,965,126
Other Caspian ports ..	3,573,537	3,158,356
To Persia	1,451,138	1,598,558
By road	2,263,915	2,356,342
	325,755,447	375,732,680

◆

IMPORTANT OIL DEVELOPMENTS IN KENTUCKY.

The past few weeks have witnessed a considerable expansion of the oil development work in the Kentucky oil fields. Until the beginning of the year drilling was, for the most part, confined to the fields of Wolfe and Wayne counties, but many operators are now engaged in the preliminary drilling of new fields, and, if favourable results are achieved, the spring is bound to see much activity. The most important of recently started work is an effort toward developing a deep oil sand in the southern part of Kentucky. The shallow sands of that region are no longer attracting capital for new developments, and the few operators, who now have considerable investments, are searching for a more permanent oil-bearing sand to restore the lower part of the State to its former prestige in oil production. Efforts to get into a deep sand in Cumberland County have already been rewarded with an excellent strike in a 1,300-foot formation, and several operators are now drilling along the same line.

◆

BATOUM PETROLEUM SHIPMENTS.

The shipments of petroleum products from Batoum during the week ended 17th February (o.s.), 1907, were (in poods):—

	Illuminating Oil.		Other Products.	
	1906.	1907.	1906.	1907.
To Europe ..	—	270,000	222,000	26,000
To the East ..	11,000	72,000	—	—
To Russian Ports	127,000	1,000	8,000	3,000
From 1st Jan. to Feb. 17th:—				
To Europe ..	955,000	1,100,000	479,000	1,572,000
To the East ..	629,000	1,917,000	—	2,000
To Russian Ports	640,000	128,000	21,000	18,000

TANK STEAMER CHARTERS DURING 1906.

MESSRS. HENRY FUNCK AND CO.'S CIRCULAR.

The following is the concluding part of the list of Tank Steamer Charters made in the United Kingdom during the past year, and compiled by Messrs. Henry Funck and Co., of 101, Leadenhall Street, London, E.C., and will be of value to our readers. The Charters made during the first six months of the year appeared in our last issue upon pages 137 and 138:—

	TONS CAP.	RATE PER TON.	PORTS OF SHIPMENT AND DESTINATION.	NUMBER OF VOYAGES.	CARGO.
July	3800	17/9	Port Arthur (Texas)—United Kingdom	1	Fuel Oil and Gas Oil.
		18/9	,, ,, ,, . 2 ports on the same coast		
		19/3 2 ports	,, ,, Birkenhead and London ..		
	4300	10/3	United States (North Atlantic Ports)—United Kingdom or Continent, excluding Hamburg	1	Refined.
		10/9	United States (North Atlantic Ports)—Hamburg ..		
	5400	16/6 1 port 17/6 2 ports	Port Arthur (Texas)—United Kingdom or Continent (Ostende, Bremerhafen)	1	Gas and Fuel Oil.
	6100	10/3	United States (North Atlantic Ports)—United Kingdom or Continent, excluding Hamburg..	1	Refined.
		10/9	United States (North Atlantic Ports)—Hamburg ..		
	6100	10/6	,, ,, ,, Antwerp ..	1	,,
		11/-	,, ,, ,, Hamburg ..		
	6000	10/6	,, ,, ,, U.K. or Cont., excluding Hamburg	1	,,
		11/-	,, ,, ,, Hamburg ..		
		11/- 2 ports	,, ,, ,, Shields & Sunderland, or *vice versa*		
	3250	15/-	New York or Philadelphia—Marseilles	1	,,
	6000	10/4½	United States (North Atlantic Ports)—United Kingdom or Continent, excluding Hamburg	3	,,
		10/10½	United States (North Atlantic Ports)—Hamburg ..		
		14/- 1 port 14/6 2 ports	,, ,, ,, West coast Italy or Sicily ..		
		15/-	,, ,, ,, Venice ..		
		15/6 2 ports	,, ,, ,, Venice and Messina		
	5200	11/3 1 port 11/9 2 ports	United States (North Atlantic Ports)—United Kingdom or Continent	1	,,
	5200	10/4½	Philadelphia— United Kingdom or Continent (Ostende, Bremerhaven)	1	,,
		10/10½	Philadelphia—Hamburg		
	3000	14/-	Kustendje—London	1	Residuum.
	5100	10/-	Batoum or Novorossisk—London or Manchester ..	1	Refined.
		11/- 2 ports	,, ,, ,, ,, and Cardiff		
	5100	10/6	Philadelphia—London	1	,,
Aug.	3800	14/- 1 port 14/6 2 ports	United States (North Atlantic Ports)—West Coast Italy or Sicily	1	,,
		15/-	,, ,, ,, Venice ..		
		15/6 2 ports	,, ,, ,, ,, and Messina		
	3900	11/9	,, ,, ,, Steilene or Vallo ..	1	,,
	3500	11/9	,, ,, ,, U.K. or Cont., Ostende, Bremerhaven	1	Refined and/or Lubricating Oil.
		12/3	,, ,, ,, Hamburg ..		
		14/- 1 port 14/6 2 ports	,, ,, ,, West Coast Italy or Sicily ..		
		15/-	,, ,, ,, Venice ..		
		15/6 2 ports	,, ,, ,, ,, and Messina		
	6200	27/6	New York or Philadelphia—Calcutta	1	Refined and/or Batching Oil.
	3400	?	Port Arthur (Texas)—United Kingdom	1	Refined.
	6000	10/6	United States (North Atlantic Ports)—United Kingdom or Continent (Ostende, Bremerhaven ..	1	,,
		11/-	United States (North Atlantic Ports)—Hamburg ..		
	4800	11/6	,, ,, ,, or Batoum—French Atlantic Ports, excluding Dunkerque and Rouen	2	Crude or Distillate.
		12/-	United States (N. Atlantic Ports) or Batoum—Dunkerque		
		12/6	,, ,, ,, ,, Rouen		
			Option loading Kustendje at a reduction of 6d. per ton		
			,, discharging at Santander on second voyage 12/6 ton		
	4300	5/3	Hamburg—Steilene	1	Refined.
	6000	10/6	United States (North Atlantic Ports—United Kingdom or Continent (Ostende, Bremerhaven) ..	1	,,
		11/-	United States (North Atlantic Ports)—Hamburg		
		11/- 2 ports	,, ,, ,, Shields and Sunderland or *vice versa*		
	5100	11/-	Philadelphia—London	1	,,
Sept.	5400	11/6	United States (North Atlantic Ports)—French Atlantic Ports, excluding Dunkerque and Rouen ..	1	Crude.
		11/9	United States (North Atlantic Ports)—Dunkerque		
		12/-	,, ,, ,, Rouen ..		
	3250	10/6	Kustendje—French Atlantic Ports, excluding Rouen	1	Distillate or Crude.
		11/3	,, Rouen		
	3800	18/6	Port Arthur (Texas)—Cette	1	Refined.
	3800	10/-	Batoum—Cardiff	1	,,
	5100	14/- 1 port 14/6 2 ports	United States (North Atlantic Ports)—West coast Italy or Sicily	1	,,
		15/-	,, ,, ,, Venice ..		
		15/6 2 ports	,, ,, ,, ,, and Messina		
	2800	9/6	Kustendje—Antwerp	1	,,
		10/-	,, Hamburg		
		11/6 2 ports	,, Antwerp and Hamburg		
	3250	13/9	,, Cette	1	Spirit.

TANK CHARTERS—*Continued.*

	TONS CAP.	RATE PER TON.	PORTS OF SHIPMENT AND DESTINATION.	NUMBER OF VOYAGES.	CARGO.
Sept. *contd.*	5100	10/3	United States (North Atlantic Ports—United Kingdom or Continent, excluding Hamburg	12 months	Refined, and/or Gas, and or Lubricating Oil.
		10/9	United States (North Atlantic Ports)—Hamburg		
		11/10½	,, ,, ,, Lisbon		
		12/4½	,, ,, ,, Oporto		
		14/- 1 port 14/6 2 ports	,, ,, ,, West coast Italy or Sicily		
		15/-	,, ,, ,, Venice		
		15/6 2 ports	,, ,, ,, ,, and Messina		
		11/4½	,, ,, ,, Sound ports		
		12/4½	,, ,, ,, Baltic ports		
			6d. per ton extra if to two ports.		
	5200	10/4½	United States (North Atlantic Ports)—United Kingdom or Continent, excluding Hamburg	12 months	Refined, and/or Gas, and/or Lubricating Oil.
		10/10½	United States (North Atlantic Ports)—Hamburg		
		12/-	,, ,, ,, Lisbon		
		12/6	,, ,, ,, Oporto		
		14/- 1 port 14/6 2 ports	,, ,, ,, West coast Italy or Sicily		
		15/-	,, ,, ,, Venice		
		15/6 2 ports	,, ,, ,, ,, and Messina		
		11/6	,, ,, ,, Sound ports		
		12/6	,, ,, ,, Baltic ports		
			6d. per ton extra if to two ports.		
Oct.	3900	11/- 1 port 11/9 2 ports	Kustendje—United Kingdom or Continent (Ostende-Hamburg)	1	Refined.
	5200	10/-	Batoum—London or Manchester	1	,,
	3500	14/6	Philadelphia—Cette	1	Crude.
	3800	17/6	Port Arthur (Texas)—Antwerp	1	Gas and/or Black Lubricating Oil.
	3800	15/3 1 port	United States (North Atlantic Ports)—London and/or Liverpool	3	Molasses.
		15/9 1 port	Cuba, Porto Rico—London and/or Liverpool		
			6d. per ton extra if to two ports.		
	3500	13/- 14/- 2 ports	Batoum—United Kingdom, or Antwerp, or Hamburg ,, ,, or London and Antwerp, or London and Hamburg, or Antwerp and Hamburg	1	Pale Lubricating Oil.
	6100	10/9	United States (North Atlantic Ports)—French Atlantic Ports excluding Rouen	1	Refined.
		11/6	United States (North Atlantic Ports)—Rouen		
	6000	10/-	,, ,, ,, United Kingdom or Continent, excluding Hamburg	1	Refined and/or Gas Oil.
		10/6	United States (North Atlantic Ports)—Hamburg		
	3800	11/6	Batoum—United Kingdom or Continent (Ostende, Bremerhafen	1	Pale Lubricating Oil,
		12/-	Batoum—Hamburg		
		12/6 2 ports	,, United Kingdom or Continent, excluding Hamburg		
		13/- 2 ports	Batoum—One United Kingdom port and Hamburg, or one Continental port and Hamburg		
	4300	11/6	Philadelphia—Bergen	1	Refined.
	5000	10/-	United States (North Atlantic Ports)—United Kingdom, including Manchester	1	Refined, and/or Gas, and/or Lubricating Oil.
	3600	11/6	Batoum—United Kingdom or Continent (Ostende, Bremerhafen)	1	Pale Lubricating Oil.
		12/-	Batoum—Hamburg		
		12/6 2 ports	,, United Kingdom or Continent (Ostende, Bremerhaven) or London and Antwerp		
		13/- 2 ports	Batoum–London and Hamburg or Antwerp and Hamburg		
	3250	10/10½ 1 port 11/10½ 2 ports	,, London and/or Antwerp	1	Refined.
	3000	12/-	Kustendje—United Kingdom, excluding Manchester	1	Gas Oil
	4300	10/6	United States (North Atlantic Ports)—Rotterdam or Amsterdam or Antwerp	1	Refined.
		11/-	United States (North Atlantic Ports)—Hamburg or Copenhagen		
	5200	10/9	United States (North Atlantic Ports)—French Atlantic Ports, excluding Rouen	1	,,
		11/6	United States (North Atlantic Ports)—Rouen		
Nov.	3800	11/4½	Batoum—Hull	1	,,
	6000	10/-	United States (North Atlantic Ports)—United Kingdom or Continent, excluding Hamburg	1	Refined and/or Gas Oil.
		10/6	United States (North Atlantic Ports)—Hamburg		
	4000	4/6	Hamburg—London	1	Refined.
	2800	7/6	Batoum—Alexandria	3	,,
	3500	17/6 1 port 18/3 2 ports	Port Arthur (Texas)—United Kingdom or Continent (Ostende, Hamburg)	1	,,
	3600	9/- per ton gross register	To trade in the West Indies	4 months	Molasses.
	5900	10/-	Batoum—U.K. or Continent, excluding Hamburg	1	Refined.
		10/6	,, Hamburg		
	4000	9/6 per ton gross register	To trade in the West Indies	5 months	Molasses.
	3800	13/-	United States (North Atlantic Ports)—Rouen	1	Refined.
	5400	10/-	,, ,, ,, London	1	Gas Oil.
	2500	10/6	New York—Belfast	1	Refined.
	6000	10/3	United States (North Atlantic Ports)—United Kingdom or Continent, excluding Hamburg	1	Refined and/or Gas Oil.
		10/9	United States (North Atlantic Ports)—Hamburg		
	5200	10/6	,, ,, ,, United Kingdom or Continent, excluding Hamburg	1	Refined.
		11/-	United States (North Atlantic Ports)—Hamburg		
	3800	17/-	Port Arthur (Texas)—United Kingdom	1	Gas Oil.
	3500	£1,900 lump sum	Sulina—Rouen	1	Refined.

TANK STEAMER CHARTERS *Continued.*

	TONS CAP.	RATE PER TON.	PORTS OF SHIPMENT AND DESTINATION.	NUMBER OF VOYAGES.	CARGO.
Nov. *contd.*	3500	13/9 1 port 14/3 2 ports	United States (North Atlantic Ports)—Lisbon and/or Oporto	1	Refined.
	3500	14/6 16/6	United States (North Atlantic Ports)—United Kingdom or Continent .. .. Cuba—United Kingdom or Continent	3	Molasses.
	6000	10/3 10/9 11/- 2 ports	United States (North Atlantic Ports)—United Kingdom or Continent, excluding Hamburg .. .. United States (North Atlantic Ports—Hamburg .. ,, ,, ,, Shields and Sunderland or *vice versa*	3	Refined.
	5000	11/4½	Batoum or Novorossisk—Manchester and Cardiff (two ports)	1	,,
	4600	13/3 14/6	United States (North Atlantic Ports) or Batoum or Novorossisk or Kustendje—French Atlantic Ports, excluding Rouen .. .. United States (North Atlantic Ports) or Batoum or Novorossisk or Kustendje—Rouen .. .. 1/3 per ton extra if loading at Braila .. .. .. 1/9 ,, ,, ,, ,, ,, & Kustendje (2ports)	1, 2 or 3	Spirit.
	6000	10/3 10/9	United States (North Atlantic Ports)—United Kingdom or Continent, excluding Hamburg .. .. United States (North Atlantic Ports)—Hamburg ..	2	Refined and/or Gas Oil.
Dec.	3000	17/6	Philadelphia—Marseilles	1	Crude.
	3000	11/9 12/3	Kustendje—French Atlantic Ports, excluding Rouen ,, Rouen	1	Distillate.
	3500	12/6 13/6 2 ports 18/- 1 port 19/- 2 ports	Batoum—United Kingdom or Antwerp or Hamburg ,, ,, or London and Antwerp or London and Hamburg or Antwerp and Hamburg Port Arthur (Texas)—St. Louis du Rhone and/or Genoa .. .. First and third voyage from Batoum, second voyage Port Arthur, Texas	3	Pale and/or Gas and/or Black and/or Refined Dark Red Lubricating Oil.
	5000	10/6 11/-	United States (North Atlantic Ports)—United Kingdom or Continent, excluding Hamburg and Bremerhafen United States (North Atlantic Ports)—Hamburg or Bremerhafen	1	Refined and/or Gas Oil.
	6000	10/6 11/-	United States (North Atlantic Ports)—United Kingdom or Continent, excluding Hamburg .. .. United States (North Atlantic Ports)—Hamburg ..	3	Refined.
	7500	10/6 11/-	United States (North Atlantic Ports)—United Kingdom or Continent, excluding Hamburg .. .. United States (North Atlantic Ports)—Hamburg ..	1	,,
	8000	28/6 1 port 29/6 2 ports 32/3	New York or Philadelphia—Kurrachee and/or Bombay ,, ,, Calcutta	1	Refined and/or Batching Oil.
	5100	10/6 11/-	United States (North Atlantic Ports)—United Kingdom or Continent, excluding Hamburg .. .. United States (North Atlantic Ports)—Hamburg ..	1	Refined.
	5400	£1,150 per month	For 3 or 6 months, £1,125 per month, for 9 or 12 months over the whole period	—	Gas Oil.
	6100	11/3	Batoum and/or Novorossisk—United Kingdom	3	Refined.
	3500	16/- 17/-	Black Sea—French Atlantic Ports, excluding Rouen ,, Rouen	1	Spirit.
	4800	13/9 2 ports	Kustendje—Havre and Rouen	1	Distillate.
	4800	11/6 12/6 2 ports 13/- 2 ports	Philadelphia—United Kingdom, including Manchester ,, ,, ... ,, Liverpool and London or Manchester and London..	1	Gas Oil.

N.B. 1.—A number of charters have been made during the year for steamers to trade East of the Suez Canal and in the Far East, the particulars of which have not been disclosed.

N.B. 2.—This compilation is to be considered as being only approximately correct, for the reason that it is not possible to trace every charter made, the exact rates paid, and all the conditions agreed upon.

ENGLISH PATENTS.

Applications Filed in Great Britain.

Improved Process for Purifying Petroleum Oils.—Edward Williams Wynne, Liverpool. No. 2314 of 1907.

Improvements in or Relating to Apparatus for Automatically Lubricating and Clarifying or Filtering Waste Oils or Lubricants.—John I. Sherwood, London. No. 265 of 1907.

Method or Process for Producing Oil and Elements of Ointments Soluble in Water.—Walter Edwin Fischer, London. (Samuel Knopf, Austria). No. 2493 of 1907.

Process of Rendering Volatile Oils, Balsams or Substances of a similar or like Nature soluble in water by a New and Simplified Method.—Josef Laboschin, London. No. 2559 of 1907.

Application Published in Great Britain.

Improvements relating to the Decomposition of Oils and other Organic Bodies.—John Harvey, Liverpool and Edward Thornhill Beckett Simpson, of Walton, Wakefield, Yorkshire. No. 26917 of 1905.

This relates to a method of decomposing oils and similar organic bodies, which consists in placing them, with or without zinc oxide or lime in a closed vessel, admitting steam under pressure, immersing electro-positive and electro-negative plates or terminals therein, and connecting said plates of terminals together or to a source of electric current.

ENGINEER WANTED.

ENGINEER Wanted for Large Petroleum Exploitation

IN RUSSIA,

In Full Prosperity. Reply by Letter—

14, Rue Kipdorp,

. . . ***ANTWERP.***

The American Oil Market.

New York, Week ended March 2nd.

Reports from the older oil fields noted some late completions of some importance. Considerable property in Illinois changed hands covering leases of 48,000 acres, on which there are 100 producing oil wells with a daily production of about 6,000 to 7,000 barrels. The recent rise in crude oil continued to stimulate efforts for new production in old as well as new territory. In some localities owners of old wells are starting in work. Old derricks and boiler houses are being repaired preparatory to cleaning out and placing the wells in shape for better productions, and thousands of old wells which were neglected will draw attention again. The Congo field continues to supply the best producers of the shallow sand districts, and the oil is of amber grade, but the producing area is confined to a small district. In the Mid-Continent oil field, says the *Oil, Paint and Drug Reporter*, favourable weather and improved marketing facilities stimulated field work. Practically the bulk of oil is being taken from the old districts, and the production is settling down to a normal basis. Although there will be no marked activity in work, wells will be drilling on numerous leases which were shut down for some time, and operations have been begun, and this year promises good activity in the fields. The feature in the market for crude oil in Texas and Louisiana was the strong undertone to prices, which underwent a further advance. In Kansas and Indian Territory conditions governing the fields are intolerable, owing, it is claimed, to prices being forced down so low by large interests, leaving little margin of profits to operators. The following prices are for Texas and Louisiana crude oils, as credit balances as posted by pipe lines, and are according to gravity:—Spindle Top, 75 to 80c.; Sour Lake, 73 to 78c.; Batson, 69 to 78c.; Saratoga, 69 to 78c.; Humble, 71 to 80c.; Dayton, 73 to 76c.; Jennings, 65c.; Shreveport, 66c. Later on, the above prices were advanced 3c. per gallon for crude oil of the several Texas and Louisiana oil fields.

REFINED AND PRODUCTS.—The demand for refined for export has been active, and trade in the local market continued seasonable. The Russian position has not changed, and the strike at Baku continues. It is claimed that if the demands of the strikers were granted it would mean an enormous increase in the production of oil of fully 30 per cent., while besides many other demands are made too numerous too mention. At Batoum the position remained unchanged, and no further steamers have been chartered to load case oil from Batoum to Far East since our last advices.

The price for barrelled oil for export closed firm, and the market is quoted at 7·75c. for New York loading, and 7·70c. for Philadelphia loading. The total engagements during the week in the local market amounted to over 313,000 barrels. The principal foreign markets remained firm. Freight rates are firm at 2s. 2d. @ 3s. 0d. hence to London, and 2s. 3d. @ 3s. 0d. to Continental ports, as to port and vessel.

Cases for export were in moderate demand, and sales of about 75,000 cases were reported. The price of plain tops closed firm at 10·25c. Freight rates closed firm and unchanged.

Crude for export remained quiet, and no sales were reported. Pennsylvania crude closed at 7·60c. in barrels. Cases for export closed quiet, and no sales have been reported.

Naphthas remain unchanged. For export, no sales have been reported.

CLOSING QUOTATIONS.

CRUDE.		Week ended Feb. 23. 1907.	Week ended Mar. 2. 1907.
National Tran. Certificates	per bbl.	$1·58@1·59	$1·63@1·64
Pennsylvania crude in bbls.	per gal.	7·60	7·65
Pennsylvania crude in bulk		4·50	4·55
Residuum, bbls. for export		6@6½	6@6½

CRUDE AT THE WELLS.

The quotations for oil represented by credit balances were ;—

	Week ended Mar. 2. 1906.	Week ended Mar. 2. 1907.
Tiona	1·65	1·73
Pennsylvania	1·73	1·63
North Lima	0·94	0·92
South Lima	0·89	0·87
Indiana	0·89	0·87
CANADIAN OIL:		
Petrolia	1·34	1·32

REFINED—FOR EXPORT.

		Week ended Feb. 23. 1907.	Week ended Mar. 2. 1907.
Cargo Lots for export	in barrels	7·75	7·75
	in bulk	4·50	4·50
Philadelphia loading	in barrels	7·70	7·70

REFINED IN CASES—110 FIRE TEST.

	Week ended Feb. 23.	Week ended Mar. 2.
3,000 to 10,000	10·40	10·40
1,000 to 3,000	10·45	10·45

REFINED—JOBBING LOTS.

In barrels, pkgs. included.

		Week ended Feb. 23.	Week ended Mar. 2.
120 fire test, S.W.	in barrels	12	12
130 fire test, S.W.		12½	12½
150 fire test, W.W.		13½	13½
In bulk from tanks		10	10
300 fire test		12¾@13½	12¾@13½

NAPHTHA AND GASOLENE.

	Week ended Feb. 23.	Week ended Mar. 2.
Naphtha, crude, car. lots, 68 @ 72 deg.	—	—
Gasolene, 86 deg.	—	23·00

PENNSYLVANIAN OIL RUNS from Feb. 22nd to Feb. 28th were:—Feb. 22nd, 315,624; Feb. 23rd and 24th, 157,487; Feb. 25th, 101,248; Feb. 26th, 92,360; Feb. 27th, 237,204; Feb. 28th, 138,750. For the month of January, 2,856,177.

THE DELIVERIES OF PENNSYLVANIA OIL for the same dates were:—351,837; 279,546; 172,790; 135,729; 165,312; 136,725. For the month of January, 5,359,617.

CHARTERS FOR THE WEEK.

The total charters for refined, crude, naphtha, etc., in bulk, barrels and cases, during the week ended March 1st and from Jan. 1st, were as follows:—

	Week.	Year.	1906.
Refined, barrels and bulk	349,133	2,302,788	1,920,800
Refined, cases	77,384	1,942,768	2,366,000
Crude, barrels and bulk	20,160	442,397	330,100
Crude, cases	—	—	65,000
Naphtha, barrels	2,803	35,054	57,600
Residuum, barrels	9	138,925	104,100
Lubricating, barrels	—	—	72,900
Total, barrels cde. eq.	512,165	4,875,511	2,242,578

CLEARANCES FOR THE WEEK.

During the week ended Mar. 1st, and since Jan. 1 the clearances of petroleum, in gallons, from the port of New York, were as follows:—

	Week.	Year.	1906.
Refined	17,310,130	88,121,800	77,548,510
Crude	100,000	737,430	210,100
Naphtha	109,200	1,293,730	2,080,150
Residuum	450	71,550	—

EXPORT STATISTICS.

The total exports from the port of New York and from the United States have been:—

	Gallons.
From New York, week ended Mar. 1st	23,080,175
Total from New York, from Jan. 1st, 1907	116,962,532
Same period last year	103,614,780
Increase	13,347,752
From United States, week ended Mar. 1st	25,581,559
Total from United States, since Jan. 1, 1907	201,450,636
Same period last year	190,573,508
Increase	10,877,128

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The "Review" Shipping List.

March 15, 1907.

(*The following abbreviations are used in this table:*—L. Left; P. Passed; Arr. Arrived; Sp. Spoken; Tr. Trading.)

Vessel.	From.	For.	Latest Date and Position.
ALICE ISABELLE	Sables d'Olonne	Philadelphia	L. Feb. 7
ALCHYMIST	Terneuse	Hamburg	Arr. Mar. 7
ALEMBIC	New York	Louisburg (C.B.)	Arr. Feb. 9
AMERICAN	San Francisco	New York	Arr. Feb. 17
APPALACHEE	Shanghai	San Francisco	Arr. Jan. 31
APSCHERON	Batoum	Antwerp	P. Dungeness, Mar. 13
ARAL	Copenhagen	Tyne	L. New York, Mar. 2
ARAS	Tyne	Kustendje	Off Ushant, Mar. 12
ARGYLL	—	—	Coasting U.S. (Pacific)
ASTRAKHAN	Philadelphia	Dover	P. Del. Break, Mar. 3
ATLAS	—	—	Coasting U.S. (Pacific)
AUGUST KORFF	Manchester	Philadelphia	L. Mar. 4
AUREOLE	Tyne	Blyth	Arr. Mar. 1
AZOV	—	—	Trading on W. C. of South Amca.
BAKU STANDARD	Kustendje	Blaye	P. Constant'ple, Mar. 7
BALAKANI	London	Kustendje	Off the Wight, Mar. 13
BATOUM	Tyne	Port Arthur (Texas)	P. Dungeness, Mar. 7
BAYONNE	Hull	Tyne	Arr. Nov. 23
BEACON LIGHT	Penarth	Port Arthur (Texas)	P. Barry Island, Mar. 7
BEME	Mormugao	Rangoon	L. Feb. 16
BLOOMFIELD	Rotterdam	Blyth	Arr. Mar. 9
BORJOM	Alexandria	Batoum	P. Constant'ple, Feb. 25
BRILLIANT	Philadelphia	Copenhagen	Arr. Mar. 9
BROADMAYNE	Tyne	Port Arthur (Texas)	Arr. Mar. 3
BULLMOUTH	Shanghai	—	L. Mar. 5
BULYSSES	Soesoe	—	P. Singapore, Feb. 21
BURGERMEISTER PETERSEN	Philadelphia	Hamburg	Arr. Mar. 1
CADAGUA	Barry	Philadelphia	Arr. Mar. 6
CALCUTTA	San Francisco	Shanghai	L. Jan. 13
CARDIUM	Cardiff	Balekpappan	P. Singapore, Mar. 7
CATANIA	San Pedro	San Francisco	L. Feb. 13
CAUCASIAN	Batoum	Hamburg	L. Algiers, Mar. 13
CHARLOIS	Philadelphia	Antwerp	P. Del. Break, Feb, 28
CHESAPEAKE	New York	Calcutta	Arr. Mar. 8
CHESTER	New York	Antwerp	P. Lizard, Mar. 13
CIRCASIAN PRINCE	—	—	Trading on W.C. of South Amca.
CLAM	Singapore	—	L. Mar. 4
COWRIE	Bombay	—	L. Mar. 8
COL. E. L. DRAKE	Sabine	New York	Arr. Jan. 12
CYMBELINE	Penarth	Batoum	P. Constant'ple, Mar. 2
CZAR NICOLAI II.	Batoum	Hamburg	Off the Wight, Mar. 12
DAGHESTAN	Tyne	Port Arthur (Texas)	L. Mar. 12
DELAWARE	Kustendje	India	L. Aden, Mar. 13
DEUTSCHLAND	Rotterdam	New York	Arr. Mar. 2
DIAMANT	New York	Hamburg	L. Mar. 1
ELAX	—	Tyne	Arr. Jan. 12
ELISE MARIE	Tyne	New York	P. Butt of Lewis, Mar. 11
ENERGIE	Rotterdam	New York	P. Lizard, Mar. 3
ERIVAN	Antwerp	Philadelphia	L. Mar. 5
ETELKA	Batoum	Bordeaux	P. Constan'ple, Mar. 3
EUPLECTELA	Batoum	Manchester	P. Tarifa, Mar. 12
EXCELSIOR	Novorossisk	Hamburg	Off the Wight, Mar. 11
EZIO	—	—	Coasting Peru
FRANCE MARIE	Marseilles	Philadelphia	L. Mar. 8
GEESTEMUNDE	New York	Danzig	L. Mar. 7
GENESSE	Philadelphia	London	At Plymouth, Mar. 13
GEORGIAN PRINCE	Havana	New York	Arr. Mar. 3
GOLDMOUTH	Bremen	Rotterdam	Arr. Mar. 9
GUT HEIL	Hamburg & Tyne	Philadelphia	Arr. Mar. 8
HAINAUT	Smyrna	Antwerp	Arr. Mar. 3
HELIOS	Bremen	Philadelphia	L. Tyne, Mar. 4
HOTHAM NEWTON	Batoum	Antwerp	At Gallipoli, Mar. 12
HOUSATONIC	Tyne	Philadelphia	P. Dunnet Head, Feb. 25
IMPERIAL	—	—	Tr. on Lakes btn. U.S. and Can.
JOANNIS COUTZIS	Rouen	Batoum	P. Tarifa, Mar. 1
J. B. AUG. KESSLER	Rotterdam	—	Off Ushant, Mar. 12
JAMES BRAND	Rouen	Tyne	Arr. Feb. 18
JULES HENRY	Philadelphia	Valencia	L. Mar. 6
KURA	Philadephila	London	P. Reedy Island, Mar. 4
LA CAMPINE	Antwerp	Philadelphia	P. Lizard, Mar. 8
LA FLANDRE	Ghent	Philadelphia	P. Lizard, Feb. 21
LA HESBAYE	New York	Antwerp	Arr. Mar. 9
LA MADELEINE	Dunkirk	Nantes	Arr. Mar. 7
LA VIGUESA	Philadelphia	Seville	P. Del. Break., Jan. 20
LACKAWANNA	Bengkalis	Port Natal	Arr. Mar. 8
LANSING	San Francisco	Vancouver	L. Feb. 27
LE COQ	Kustendje	Havre	L. Constant'ple, Mar. 4
LOUTSCH	Barcelona	Novorossisk	P, Dardenelles, Jan. 10
LUCERNA	Philadelphia	London	L. Mar. 9
LUCIFER	Manchester	New York	P. Mar. 8, 51 N., 13 W.
LUCIGEN	Tyne	Philadelphia	P. Dunnet Head, Feb. 28
LUCILINE	Cette	Batoum	P. Constant'ple, Feb. 28
LUMEN	Philadelphia	Venice	P. Reedy Island, Mar. 2
LUX	Philadelphia	Rouen	P. Del. Break, Feb. 27
MANHATTAN	Venice	Batoum	L. Mar. 8
MANNHEIM	New York	Flushing	P. Scilly, Mar. 12
MARGARETHA	Kustendje	Italy	L. Mar. 6
MAVERICK	San Diego	San Francisco	Arr. Feb. 20
METEOR	Genoa	Odessa	Arr. Mar. 5
MEXICAN PRINCE	Cienfuegos	—	L. Mar. 1
MIRA	Tyne	New York	Arr. Mar. 8
MUREX	Soesoe	—	L. Singapore, Mar. 11
NARRAGANSETT	London	New York	P. Nantucket, Mar. 13
NERITE	—	—	Tr. in China Seas
NEW YORK	Southampton	New York	Arr. Mar. 10
OCEAN	Philadelphia	Amsterdam	Arr. Mar. 11
OILFIELD	Tyne	Philadelphia	P. Dunnet Head, Mar. 6
ORANJE PRINCE	Tyne	Cuba	P. Prawle, Feb. 18
ORIFLAMME	Rouen	Philadelphia	L. Feb. 24
OSCEOLA	Genoa and St. Vincent (C.V.)	Axim	Arr. Jan. 31
OTTAWA	Philadelphia	Tampico	P. Del. Break, Mar. 1
OURAL	Manchester	Batoum	L. Mar. 13
PALEMBANG	Madras	—	P. Colombo, Feb. 3
PAULA	New York	Stettin	Arr. Mar. 10
PECTAN	Port Arthur (Texas)	—	L. Newport News Mar. 5
PENNOIL	Philadelphia	Rotterdam	Arr. Feb. 27
PERLAK	Pankalan	Scesoe	L. Feb. 11

Vessel.	From.	For.	Latest Date and Position.
PHOEBUS	Rotterdam..	New York ..	Arr. Mar. 7
PINNA	Hamburg ..	Tyne	Arr. Mar. 12
POTOMAC	Philadelphia	Liverpool ..	At Belfast, Mar. 12
PROMETHEUS	Rotterdam ..	New York	Off I. of W., Mar. 12
PRUDENTIA	Swansea	Kustendje ..	P. Tarifa, Mar. 13
QUEVILLY	Rouen	Philadelphia	P. Lizard, Feb. 23
RION	Philadelphia	Manchester & Avonmouth	At Manchester, Mar. 13
ROCK LIGHT	Port Arthur (Texas)	Dover	L.Newport News, Mar. 1
ROSSIJA	Bougie	Middlesbro'	Arr. Mar. 8
ROTTERDAM	New York ..	Flushing....	L. Mar. 3
RUSSIAN PRINCE	Boston	New York ..	L. Mar. 2
SALAHADJI	—	—	Tr. Sts. Settlem'ts and Java Seas
SAXOLEINE	Tyne	Philadelphia	Arr. Mar. 1
SEMINOLE........	San Francisco	Kurrachee ..	L. Shanghai, Feb. 21
SILVERLIP	Balekpappan	—	L. Mar. 10
SINGU	—	—	Tr. in East Indies
SNOWFLAKE	Novorossisk	Havre	Arr. Mar. 12
SOPHIE	Tunis	Batoum	L. Constant'ple, Mar. 1
SPONDILUS	Soesoe......	—	L. Mar. 12
STANDARD	Philadelphia	Swinemuude	P. Del. Break., Mar. 4
STROMBUS	New York ..	Calcutta	L. Feb. 22
SURAM	London	—	P. Flambro' Hd., Mar. 13
SUWANEE	Dublin......	Kustendje ..	L. Feb. 25
SVIET	Batoum	Odessa	L. Dec. 26
TELENA	Singapore ..	—	L. Port Natal, Feb. 24
TEREK............	Manchester	Batoum	P. Peniche, Mar. 11
TIFLIS	Tyne	Batoum	P. Tarifa, Mar. 7
TIOGA	Philadelphia	Manchester	Arr. Mar. 12
TONAWANDA	San Francisco	Shanghai ..	At Hankow, Mar. 3
TROCAS	Kobe	—	L. Mar. 9
TURBO	Novorossisk	Hamburg ..	Arr. Mar. 6
TUSCARORA	San Francisco	Madras	L. Feb. 27
TWINGONE	Rangoon ..	Madras	L. Feb. 25
VEDRA	Philadelphia	Flushing	L. Mar. 1
VILLE DE DIEPPE	—	—	In Port Havre, Feb. 27
VILLE DE DOUAI	Dunkirk	Middlesboro	Arr. Feb. 25
VOLUTE	—	Yokohama ..	Arr. Mar. 11
WASHINGTON	Kustendje ..	Bombay	At Port Said, Mar. 12
WEEHAWKEN	Tyne	Philadelphia	Arr. Mar. 8
WILLKOMMEN ..	Philadelphia	Rotterdam ..	L. Mar. 8
WINNEBAGO......	San Francisco	Shanghai ..	L. Feb. 14

Latest Market Intelligence.

LONDON OIL MARKET.

Supplied by Messrs. Benjamin & Gee, 31, St. Mary Axe, E.C.

March 15th, 1907.

Refined Petroleum remains unchanged in price and very little business doing. The latest quotations are:—Russian and Roumanian, 6¼d.-6⅜d.; American, 6¾d.-6⅞d.; Water White, 7¾d.-7⅞d.

LUBRICATING OILS

are unchanged as follows:—

American pale, £7 7s. 6d. to £11.
American dark cylinder, from £7 12s.
American filtered cylinder, from £11.
Shellene, £5.
No. 1 Russian, £10 7s. 6d.

TURPENTINE.

American Turpentine remains high in price and very firm, fluctuating but slightly. For Spot and up to the end of June, it is quoted 51s. 6d.; July to December, 46s. 6d.

LIVERPOOL OIL MARKET.

March 14th.

Refined oils are quiet, and sellers quote 6⅛d. for Russian, Galician or Roumanian; and 6⅝d. to 7⅝d. per gallon for American.

Petroleum Spirit continues at 1s. 0½d. to 1s. 3d. per gallon for American deodorised, according to quality on the spot.

LATEST AMERICAN PRICES.

New York, March 14th.

Refined, in cases, is steady at 10·50; Standard White, 8·00; Credit balances, 1·78c.

Philadelphia, March 14th.

Standard White is still quoted at 7·95.

RUSSIA.

Baku, March 11th.

The Baku oil market is firm. Light crude oil, spot, 26¼-26¾ copecs per pood; residuals, in ships, delivery during navigation, 29; kerosene, in ships, delivery during navigation, 28½-29 copecs.

BELGIUM.

Antwerp, March 10th.

The petroleum market is unchanged. Price of Standard White, spot, 20½ francs per 100 kilos.

FRANCE.

Paris, March 12th.

Illuminating oil is quoted in bulk, in whole tank waggons, 22 francs per hectolitre; spirit, 29·25 francs per hectolitre. Special white oil, 30 francs per hectolitre.

GERMANY.

Hamburg, March 11th.

The kerosene market is firm. The price of American Standard White is 6·80 marks per 50 kilos, Russian, 6·55 marks.

ROUMANIA.

March 11th.

	Francs.
Crude oil from different fields, including pipe line charges, per 100 kgs. ...	4·00-4·20
Refined oil, exclusive of taxes	10·00- —
Motor benzine, including taxes	16·00-18·00
Benzine, doubly refined	24·00-25·00
Residuals in tank waggons, at refinery ...	3·20-3·60
Paraffin	120·00-125·00
Lubricating Oils—	
Agricultural...	30-32
Prime	35-37
Extra	40-42
Royal	45-46

In barrels free on rail including octro tax of 12 fcs. per 100 kilos

Prices for Export.

Refined oil in tank waggons, per 100 kgs.	8·50- —
Benzine, sp. gr. 0·710-0·715	21·00-22·00
„ sp. gr. 0·720-0·725	19·00-20·00
„ sp. gr. 0·730-0·740	13·00-14·00
„ sp. gr. 0·745-0·755	9·00-10·00

INDIA.

Bombay, February 28th.

Petroleum is steady.

Standard Oil Co., of New York.

Current rates are:—

American, "Snowflake," 150 deg.	Rs. 6	0	2
„ Chester, 125 deg.	4	8	2
„ Monkey Brand, 125 deg.	4	0	2
„ Bulk, 125 deg. (in local made tins).. ..	3	10	0
„ „ 125 deg. (8 Imperial gallons) ..	3	0	0
„ "White Camelia" brand, 125 deg. ..	No stock.		

The Asiatic Petroleum Company, Limited.

Current rates are:—

"Swan" Brand oil, in tins, per pair	3	2	0
Sumatra "Rising Sun," bulk, per unit	3	0	0
„ „ tins, per pair	3	10	0
Silverlight cases, per case	4	8	0
Sumatra, "Anchor" per case	4	14	0

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IMPORTS of PETROLEUM into UNITED KINGDOM

Specially prepared for this Journal by the Custom House.

FOR THE WEEK ENDED MARCH 4TH, 1907—

Date.	Port and Importers.	Description.	No. of Gals.	Port Whence.
Feb.	London—			
26	W. B. Dick and Co. ..	Lub.	6,250	Antwerp
27	Asiatic Petroleum Co. ..	Spirit	1,000	Rotterdam
27	Chas. Capel and Leonard ..	,,	35,250	,,
27	London & India Docks Co..	Lub.	2,150	Hamburg
27	Scott's Wharf	,,	10,040	New York
27	Mordaunt Bros.	,,	11,550	,,
28	Anglo-American Oil Co. ..	,,	38,520	,,
28	Page, Son and East ..	,,	760	Antwerp
28	G. W. Sheldon and Co. ..	,,	8,300	New York
28	G and H. Green	,,	3,330	Boston
28	Consolidated Petroleum Co. (Balakani)	Gas	1,251,800	Pt. Arthur
Mar.				
4	G. W. Sheldon and Co. ..	Lub.	1,320	New York
4	A. Brown and Co.	,,	4,800	Philadel.
4	,, ..	,,	2,000	Hamburg
4	Fielder, Hickman and Co...	,,	7,600	Stettin
Feb.	Liverpool—			
26	Anglo-American Oil Co. (August Korff)	Lamp	282,380	Philadel.
26	,, ,,	Gas	179,840	,,
26	,, ,,	Lub.	676,560	,,
26	Crew, Levick and Co. ..	,,	6,230	,,
26	George B. Taylor	,,	51,800	New York
26	Burnaby and Chantrell ..	L.Comp.	1,460	,,
26	,, ...	,,	280	Hamburg
27	Vacuum Oil Co.	Lub.	2,070	New York
28	C. C. Wakefield and Co. ..	,,	260	Antwerp
Mar.				
1	Meade-King, Robinson & Co.	,,	2,400	Baltimore
2	,, ..	,,	5,200	,,
2	Pickfords	,,	1,240	Hamburg
Feb.	Bristol—			
26	Western Pet. Co. (Terek) ..	Lamp	690,000	New York
26	H. R. James and Sons ..	M.Colza	560	,,
26	,, ...	Lub.	2,680	,,
26	W. Smith and Co.	,,	400	,,
28	Ford and Canning	,,	1,000	Hamburg
Mar.				
1	Pickford's, Ltd.	,,	1,430	,,
Feb.	Grimsby—			
28	J. Sutcliffe and Son	,,	400	Antwerp
	Hull—			
27	Wilsons and N.E. Railway Shipping Co.	Lub.	3,000	Hamburg
28	,, ,,	,,	2,200	Antwerp
28	,, ,,	,,	10,240	,,
28	,, ,,	,,	600	Riga
28	,, ,,	,,	39,000	New York
	Manchester—			
26	Meade-King, Robinson & Co.	,,	56,800	Philadel.
26	W. Hodgson and Co. ..	,,	630	Hamburg
26	Schofield and Co.	,,	500	,,
Mar.				
1	Consolidated Pet. Co. (Terek)	Lamp	675,000	New York
2	Lamport and Holt	Lub.	1,440	,,
4	Liverpool Storage Co. ..	,,	5,600	,,
4	Anglo-American Oil Co. (August Korff)	,,	149,330	Philadel.
Feb.	Middlesbro'—			
27	E. Harris and Co. ..	,,	2,000	Antwerp
	Newcastle—			
26	Tyne-Tees S.S. Co. ..	,,	3,720	,,
28	W. Swanston and Sons ..	Lamp	480	Amsterdam
	South Shields—			
21	Anglo-American Oil Co. (Aureole)	,,	368,090	New York
	Glasgow—			
28	Donaldson Bros.	Lub.	3,100	Baltimore
	Grangemouth—			
28	W. Graham-Yooll and Co...	Lamp	9,440	Hamburg
28	J. Currie and Co.	L.Paste	250	,,
	Leith—			
26	J. Currie and Co.	Lub.	1,200	,,
26	W. Graham-Yooll and Co..	Lamp	11,120	,,
28	J. Currie and Co.	Lub.	310	,,
28	W. Graham-Yooll and Co...	Lamp	9,420	,,
28	Henderson and McIntosh ..	Lub.	5,600	Philadel.
	Total for Week		4,649,930	

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FOR THE WEEK ENDING MARCH 11TH, 1907—

Date.	Port and Importers.	Description.	No. of Galls.	Port Whence.
Mar.	London—			
5	Produce Brokers	Lub.	2,800	Hamburg
5	Fielder, Hickman and Co...	,,	4,800	,,
5	Scott's Wharf	,,	2,000	New York
5	Humphrey and Co.	,,	3,820	,,
5	Anglo-American Oil Co.	,,	71,720	,,
5	Consolidated Petrolenm Co. (Suram)	Gas	1,315,280	Philadel.
6	Worthington and Boler ..	Lub.	6,000	,,
6	Page, Son and East.. ..	,,	280	Antwerp
7	,, ..	Lub.Gr.	120	,,
7	J. Owen	Tar Oil	2,160	Rotterdam
7	London and India Dock Co.	Lub.	3,100	Hamburg
7	Anglo-American Oil Co. ..	,,	59,400	New York
7	Mordaunt Bros.	,,	2,500	Philadel.
8	G. and H. Green	L.Comp.	3,330	New York
8	A. E. Piggott..	Lub.	480	,,
8	A. Brown and Co.	,,	2,400	Philadel.
8	B. Jacob and Sons	,,	4,000	,,
9	Fielder, Hickman and Co...	,,	33,800	,,
9	Lubricating & Fuel Oils, Ld.	,,	10,210	,,
9	Anglo-American Oil Co. ..	,,	67,000	,,
9	,, ,, ..	M.Colza	20,000	,,

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Date.	Port and Importers.	Description.	No. of Galls.	Port Whence.
Mar.	LIVERPOOL—			
5	Geo. B. Taylor	Lub.	1,000	New York
5	Burnaby and Chantrell	L.Comp.	390	,,
7	W. B. Dick and Co.	Lub.	16,800	Philadel.
8	Vacuum Oil Co.	,,	8,000	,,
8	Meade-King, Robinson & Co. (Oural)	,,	348,490	Batoum
9	,, ,,	,,	2,440	Baltimore
9	,, ,,	Resid.	8,000	Trieste
9	,, ,,	Lub.	42,960	Philadel.
9	American Line	,,	2,160	,,
9	Worthington and Boler	,,	600	,,
9	A. Hopps and Son	,,	6,670	,,
9	Crew, Levick and Co.	M.Colza	3,180	,,
9	,,	Lub.	26,980	,,
9	,,	Resid.	2,550	Newp't Nws.
9	A. Hopps and Sons	,,	8.000	,,
9	Pickford's	Lub.	680	Hamburg
9	C. W. Field	,,	210	Antwerp
	BRISTOL—			
5	H. R. James and Sons	,,	3,600	New York
	HULL—			
5	Wilsons and N.E. Railway Shipping Co.	,,	8,000	Trieste
7	,, ,,	,,	50,400	New York
7	W. Gilyott and Co.	,,	89,120	,,
7	Hull & Netherlands S.S. Co.	Tar oil	7,200	Rotterdam
8	Wilsons and N.E. Railway Shipping Co.	Lub.	1,400	Hamburg
Mar.	MANCHESTER—			
5	Diamond Lubricating Co.	Lub.	2,400	New York
5	Geo. B. Taylor	,,	187,120	,,
	MIDDLESBRO'—			
9	J. J. Sutherland	,,	800	Antwerp
	NEWCASTLE—			
7	Anglo-American Oil Co.	,,	103,880	New York
7	Furness, Withy and Co.	,,	15,200	,,
7	Tyne-Tees Steamship Co.	,,	160	Hamburg
7	,,	,,	600	Antwerp
11	,,	,,	4,200	,,
	DUNDEE—			
7	D. Alexander and Sons	Crude	400	Hamburg
	GLASGOW—			
5	Anchor Line	Lub.	19,600	New York
5	,,	,,	34,440	,,
7	J. and A. Allan	,,	69,400	Philadel.
	GRANGEMOUTH—			
5	J. Currie and Co.	,,	2,760	Hamburg
5	,,	,,	240	,,
	LEITH—			
5	G. Gibson and Co.	,,	680	Antwerp
5	W. Graham-Yooll and Co.	,,	6,800	Hamburg
5	,,	,,	6,800	,,
	BELFAST—			
8	Anglo-American Oil Co. (Potomac)	,,	429,600	Philadel.
	Total for the Week		3,139,110	
	Total for the past Fortnight		7,789,040	

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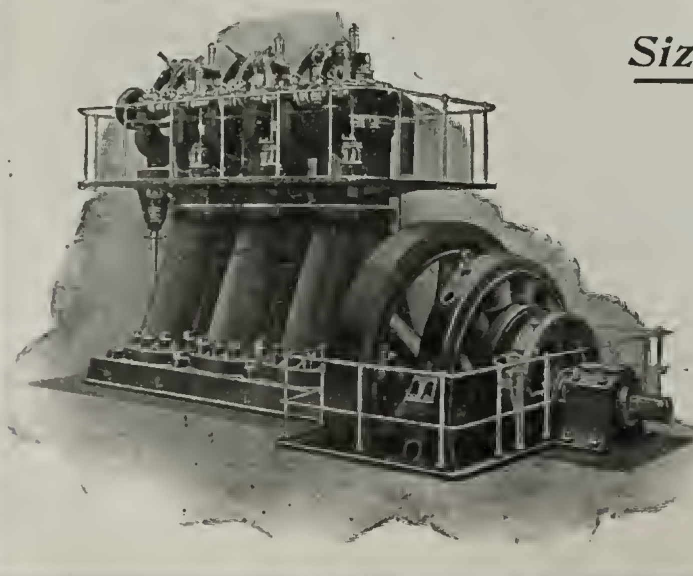

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The Petroleum Review.

By PAUL DVORKOVITZ.

Vol. XVI. *(New Series.)* March 30th, 1907. No. 395.

Editorial Notes.

Our Bound Volumes.

In view of the fact that we are constantly receiving enquiries respecting certain back issues of the Review, we would again bring to the notice of our readers, and especially our new subscribers, that the whole of the issues of the Petroleum Review can be obtained in bound volumes. The volumes, of which the first few are becoming exceedingly scarce, form, as it were, an encyclopædia of the world's petroleum industry, and contain information which is bound to be of the greatest assistance and benefit to those who, especially during recent times, have taken an active interest in the petroleum developments of the two hemispheres. The volumes, of which there are now 15, will form a very valuable addition to any library, and, seeing that the earlier ones are almost out of print, we feel it our duty to make this statement in order to prevent disappointment hereafter. The manager of our publishing department will be pleased to furnish a list of prices for any, or the whole of the volumes upon receiving a postcard to that effect.

February in the American Fields.

Although an advance in price was made during February in both high and low grade oils, this came too late to have any marked effect upon petroleum developments, and consequently the month was, on the whole, an uneventful one, at least so far as the Pennsylvanian fields were concerned. The steady decline in the production of high grade oils on the one hand, combined with an increasing demand for the lighter products of the Pennsylvanian oils on the other, have naturally tended to this higher market. Yet it is doubtful if this incentive to fresh drilling will have the desired result of increasing the yield of light oil. As we say, the enhanced values had little or no effect upon operations during February, but it is significant that the new production of high grade oil during the month declined by over 2,000 barrels, and was the smallest amount on record for many years, though the average yield of the wells was about the same as for several months past—nine and a-half barrels each. There was considerable activity in the Illinois fields during the month, and the production was about 10,000 barrels, while in the Mid-Continent regions the new production was over double as much, the pipe line runs surpassing all previous records. In the latter-mentioned fields, the pipe line facilities have been considerably improved of late, and consequently developments are no longer hampered by lack of transportation. The past month witnessed an increase of the production of the Texas and Louisiana fields, and the rapid diminution of stocks has for the present been prevented.

Peace Again at Baku.

Peace again reigns at Baku, for the various strikes at the oil fields, and which are referred to in other parts of the Review, have, according to latest information, come to an end. This news in itself must be of a very gratifying nature to all who are in any way interested in the Russian petroleum industry, for it has long been evident that these constantly recurring conflicts between masters and men are leading to consequences which may bring about a permanent injury to the country's petroleum industry. Taking into account the fact that there was quite an epidemic of strikes on the fields during February, the production of Baku—about 37,500,000 poods—for that month cannot but be considered as highly satisfactory, especially as February is shorter by two or three days than any other month of the year. The output during the month shews that under normal conditions the production would have been much larger as a result of the active drilling campaign which is now being carried on. One can only hope that henceforth we shall have a period free from the fears of labour conflicts, given which the Russian petroleum industry is bound to make real progress. The production of the principal firms during the month is found upon another page of this issue, and in connection with this we would only say that as in January, so in February, the Schibaieff Petroleum Co. heads the list of English companies operating in the Baku fields.

The London and Thames Haven Oil Wharves.

Another highly-successful year has been registered by the London and Thames Haven Oil Wharves, Ltd., whose shareholders met the other day to listen to a most satisfactory statement—and the declaration of an 8 per cent. dividend—from their President. The period of depression through which this country's oil trade passed a year or two ago, naturally had its effect upon this enterprising concern, but that is now a matter of history, and a repetition of those anxious periods are not even contemplated. It is not the privilege of many of our readers to be so conversant with that remarkably well-equipped storage installation at Thames Haven as we are, but we can give our assurance that the company—thanks to its able management—has kept abreast of the march of progress and is now ready to cope with the most extensive demand there may be for the storage of petroleum products. The directors have not been unmindful of the significance of the move recently initiated by the Admiralty in adopting liquid fuel so generally, and it will come as a surprise to many to know that at Thames Haven there is room and to spare for our largest men-o'-war to draw alongside the enormous storage tanks and take in a full supply of oil fuel in a few hours. Such care and enterprise as that exercised by the management of the Thames Haven Oil Wharves has, we are pleased to see, met with its reward.

DEATH OF M. BERTHELOT.

We deeply regret to record the decease of M. Berthelot, the eminent French Chemist, whose works upon petroleum and various subjects closely associated with the industry are known throughout the world. In our next issue we intend to refer to some of the more important of these numerons treatises, but we would here specially mention his publication "Les Carbures d'hydrogène"—published six years ago, which includes investigations covering a period of 50 years—1851 to 1901.

M. Berthelot's valuable services to petroleum science were recognised during the holding of the first Petroleum Congress in Paris in 1900, when the following telegram was despatched to the now deceased gentleman:—

> Le premier Congrès International du Pétrole, reuni à Paris le 24 Aout 1900 a, sur la proposition du Professor Zaloziecki, rendu homage à la science francaise, à laquelle on dost les premiers travaux sur les huiles minérales. Il a, par acclamation, salué le nom de Berthelot, en reconnaissance de ses magistrales, études sur les hydrocarbures.

◆

THE "SHELL" AND ROYAL DUTCH COMPANIES AMALGAMATION.

At a meeting of the Royal Dutch Petroleum Co., held on the 26th inst., the following statement was made regarding the arrangement between that company and the "Shell" Transport and Trading Co., Ltd., reference to which was made in the REVIEW some little time ago.

Both the Royal Dutch and the "Shell" Companies remain in existence as separate concerns, but both transfer all their respective assets to two companies—one to be a Dutch company to take over and carry on the petroleum producing and refining business, and an English company which will purchase the products of the Dutch company, carry, store and market the same. In the Dutch company the Royal Dutch Co., will hold 60 per cent. of the shares, and the "Shell" Co. 40 per cent.; in the English company the proportion will be the same with the provision of an eventual division into three equal parts under the same condition as now apply to the Asiatic Petroleum Co. The Royal Dutch Co. and "Shell" Co. undertake to find the working capital, fixed at 6,000,000 florins, for the two new companies in the same proportion of 60 per cent. and 40 per cent. respectively.

The new Dutch company will be called the Bataafsche Petroleum Maatschappij, and will have a nominal capital of 80,000,000 florins. The English company will bear the title of the Anglo-Saxon Petroleum Co., Ltd., with a capital of £4,000,000.

The Royal Dutch Co. will take up £500,000 shares of the "Shell" at 150 per cent. of their nominal value.

All the tank steamers' storage installation of the Asiatic Petroleum Co. will go over to the Anglo-Saxon Petroleum Co.

In view of the predominance of the Royal Dutch Co. in the two new companies certain guarantees have been arranged to safeguard the interests of the "Shell" Co.'s shareholders.

It has been arranged that for the first 10 years the division of profits of the two new companies shall be as follows:—Out of the first £375,000 earned, first of all the "Shell" Co. will receive £50,000 per annum to enable it to pay 5 per cent. on its preference shares; next the Royal Dutch Co. will receive £12,000, representing 4 per cent. on the present preference issue; then £100,000 will go to the "Shell" Co. to pay 5 per cent. on its ordinary shares; and, finally, £213,000 will go to the Royal Dutch to make up its 60 per cent. interest against the 40 per cent. of the "Shell" Co.

In the case of voluntary or compulsory winding up of the two new companies the first 9,000,000 florins are to be divided equally, and only the surplus divided in the proportion of 60 and 40 per cent.

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LONDON OIL SHARE MARKET.

WEDNESDAY, MARCH 27TH, 1907.

Dealing has been on a very small scale in connection with Oil Shares since we last wrote, but changes in price are all of a downward character for the general weakness of the Stock Markets, upon which we then commented, has been seriously accentuated; declines recorded in American Shares causing quite a panic both here and in New York. As we write, a decidedly better tone has set in, and it is hoped any very serious failures will be avoided.

From the prices we quoted in our last issue, on the following Monday Spies moved a little, closing $\frac{1}{2}$-$\frac{9}{16}$, and on Wednesday Baku Preference lost 6d. at 4s. 6d. to 5s. 6d., while Friday's business saw further weakness, Baku Ordinary declining 9d. per share to 2s. 3d. to 2s. 9d., and Californian Oilfields losing $\frac{1}{4}$ at $5\frac{1}{2}$-6, and the following day Assam Oil shed $\frac{1}{16}$ at $\frac{1}{2}$-$\frac{5}{8}$.

This week's changes shew a loss of 1s. in Shell Transport Ordinary, while Spies were easy at $\frac{15}{32}$-$\frac{17}{32}$ on Monday, and a loss of 1s. in Russian Preference at 8s. 6d. to 9s. 6d.

At the Mid-April Settlement, Contangoes ruled about the same as at last Settlement, while the list of making-up figures disclose an almost unbroken list of declines, although they are not very important. Baku Ordinary at 2s. 9d., Preference at 4s. 9d., Russian Ordinary at 8s. 9d. all lose 3d. per share, Californian Oilfields at $5\frac{13}{16}$ lose $\frac{1}{16}$ Russian Preference, at 9s. 6d. lose 9d., Spies at 9s. 9d. lose 1s. 3d., while Schibaieff Ordinary at 5s. 6d. lose 6d. and the Preference $\frac{1}{8}$ at $2\frac{1}{8}$. Anglo-Russians were unchanged at 1s. while Shell Ordinary shews the only rise of $\frac{1}{32}$, at $2\frac{3}{32}$.

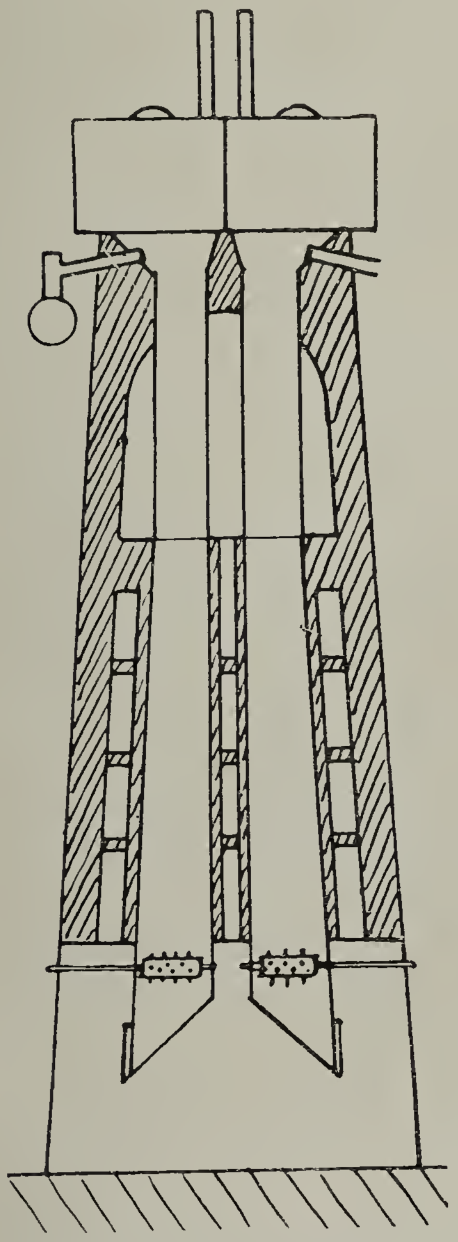
For latest quotations, see page 180.

THE SHALE INDUSTRY IN SCOTLAND.

THE PROCESS OF MANUFACTURE.

Continuing our review of the important publication recently issued by order of the Commissioners of His Majesty's Treasury dealing with the oil-shales of the Lothians, we come to that portion of the third part of the work which deals with the process of manufacture, this, like that of the chemistry of the oil shales, being from the pen of Mr. D. R. Steuart.

The crude oil works consist of benches of retorts, the condensers, and the ammonia house. They are generally placed in the middle of the shale field, and much of the shale is tipped from the miners' hutches into the breaking machine. As it is expensive to haul it far underground, pits or mines are sunk over the field, and the shale is brought in railway waggons to be emptied by hydraulic machinery into the breaking machine. The shale is broken into small pieces by passing between two toothed drums, being two tough to break like road metal. From the breaker, it falls into hutches (small waggons) which are taken up an incline by wire rope or chain to the top of the retort bench and emptied into the retorts. Since the first horizontal iron type of retort was tried by Mr. James Young, many forms have been tried, each introducing some new features. One, which has been highly successful and widely adopted for a time was patented by Mr. N. M. Henderson in 1873, this being made of cast-iron, one and a-half inches thick, 15 feet long, of oval section two and a-half feet by one foot. The charge was 18 cwt., which lay 16 hours without movement in the retort, distilling off the crude oil, ammonia water, and permanent gases. Thereafter the spent shale, which contained about 12 per cent. of carbon was dropped into the furnace below to act as fuel for the next charge. In 1881 the Young and Beilby retort was introduced, this type greatly increasing the permanent or fuel gas, and gave a larger yield of sulphate of ammonia. The retorts now in operation are framed on the Young and Bielby principle, two of which are here illustrated. The first is known as the Henderson retort and is in its latest form. It has two toothed rollers at the bottom that support the weight of the column of shale, and, revolving at a regulated pace, keep the shale always in motion, which is discharged into a hopper below. There is a large hopper above, to do away with charging by night. The products come off at the bottom of the top hopper, and the total height from the ground levelled to the top of the upper is 63 feet, 15 tons of shale being placed in the retort at one time. The shale remains in the heat of the retort for 30 hours. The second sketch of the Bryson retort is, like the first mentioned, also a very long one, but differs from the last described in having a circular cross-section. It has a table below to support the column of shale, and there is a revolving arm to keep up the movement of the shale downwards. The bottom hoppers converge, so that a single line of rails under the centre of the bench receives the spent shale from both sides in a hutch, by which means, labour is reduced to a minimum. The retorts here referred to are of the continuous-working variety. The old retorts gave a crude oil that was dark and tarry, with a specific gravity of from ·880 to 1895. Henderson's 1873 pattern gave a green coloured



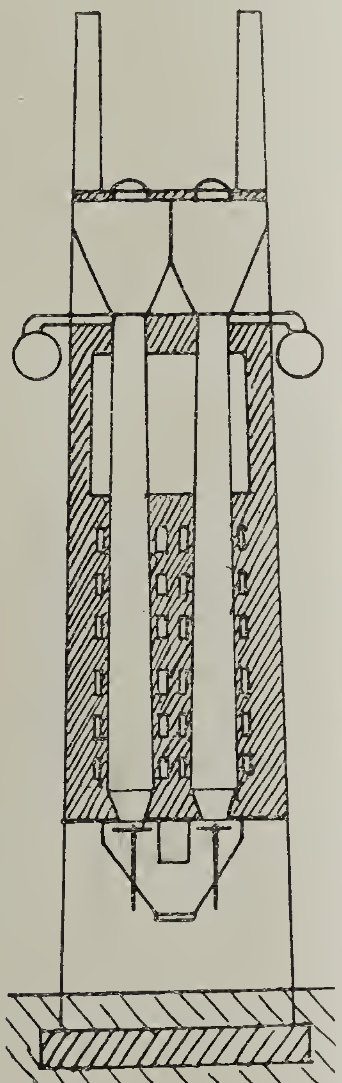
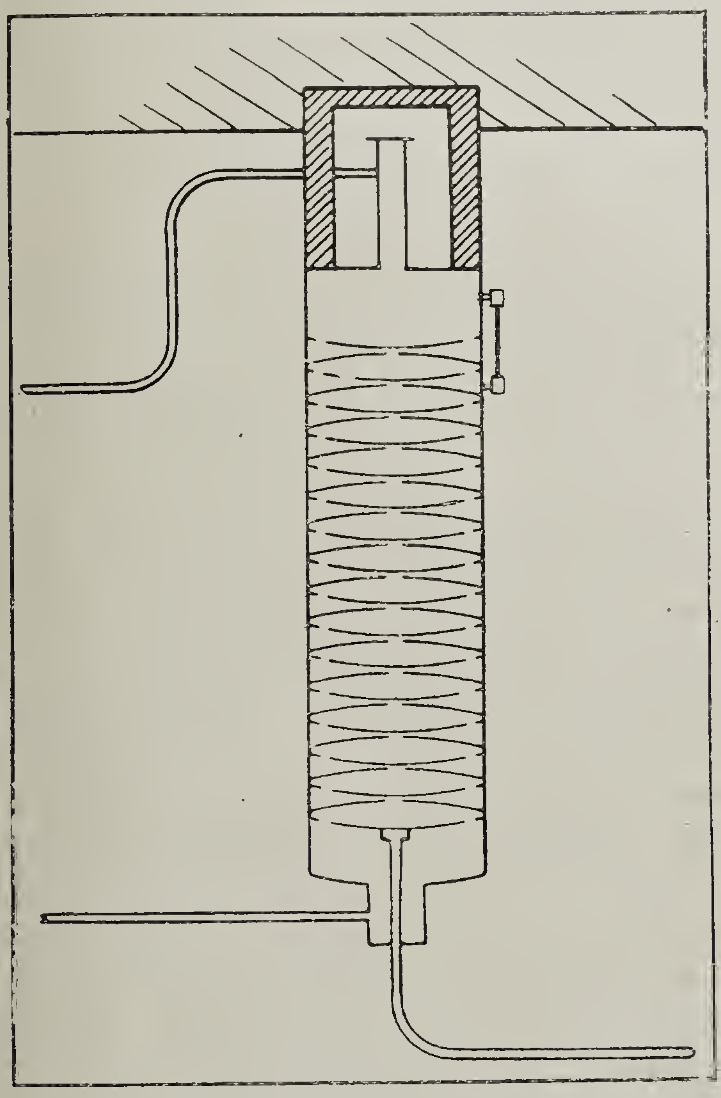


Fig. 1.—The Henderson Retort.
Fig. 2.—The Bryson Retort.



The Beilby Ammonia Column Still.

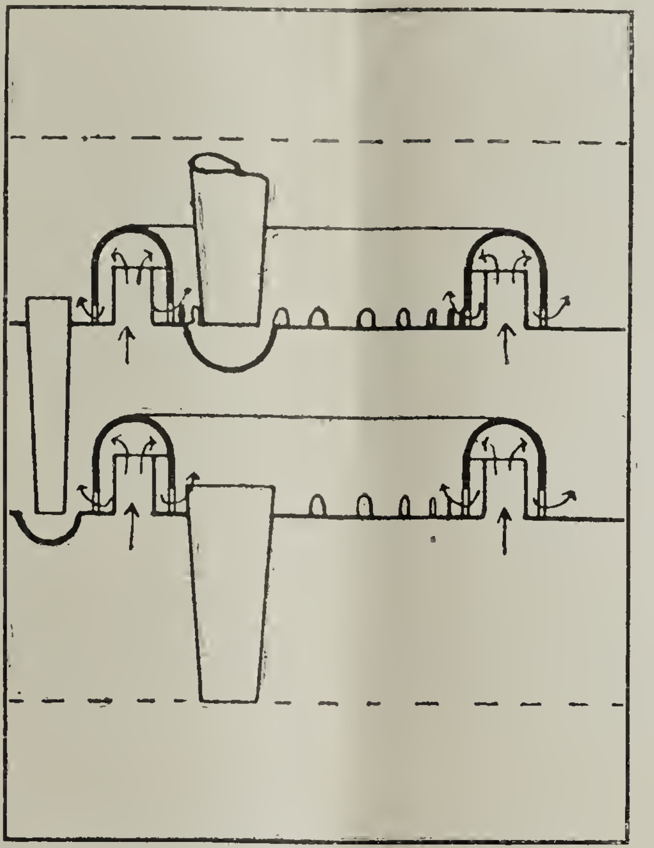
crude oil with a specific gravity from ·865 to ·870 with 2½ per cent. more solid paraffin, a lubricating oil that was more viscous and 2½ per cent. more total products. The newer retorts, however, give more crude oil per ton, which is not quite so easily refined and involves more loss in refining; but the total refined products are more on the whole, and what was not anticipated, the solid paraffin is increased. Long exposure to high heat tends to make paraffin break up into paraffin and olefine of smaller molecule. Olefines by depositing carbon can become converted into paraffin. Olefines at moderately high temperatures sometimes contracts in volume and form condensation products containing paraffin. A main is led to the condensers from the retorts. On the way, the vapours are chilled by passing through a tower in which water from the steam boilers is heated in pipes. The ammonia and crude oil collected from the condensers then runs through a separator. The old retorts gave less than 3,000 cubic feet of permanent gas per ton, but the new ones of the Young and Beilby type give about 14,000 cubic feet. The gas on leaving the condensers is scrubbed from ammonia and naphtha by passing up water towers, and finally up a heavy oil tower, and the heavy oil, showering down, catches the light naphtha which is afterwards distilled from it. The permanent gas, thus freed from all condensable matters, is caught by a fan which forces the gas under a few inches pressure into the main that supplies the burners at the bottom of the retort flues.

The results of the shale distillation are:—Spent shale, that is of no value at present, whose removal involves expense; permanent gas used as fuel for the retorts themselves; crude oil; and ammonia. The ammonia is distilled in tower stills, the first used being that of Beilby here illustrated, but others are now in operation, of which the Henderson type is an example. The ammonia water heated by interchange of heat with the spent ammonia water is run on to the top, and goes from tray to tray, acted upon by steam of 30 lbs. pressure, blown in at the bottom of the column. Hence the water boils, and the volatile ammonia compounds are expelled as gas and caught in sulphuric acid. The sulphuric acid used to refine the oil is separated from the tar by washing with hot water, and the recovered acid is saturated with ammonia gas, and sent into the market as sulphate of ammonia. This recovered acid gives a solution which has to be boiled down to obtain the salt, but the quantity got only serves for a fraction of the ammonia. The rest is passed into a cracker box of fresh sulphuric acid in lead pipes, with holes in the part laid along the bottom, where there is a constant stream of sulphuric acid flowing in, and also a constant current of ammonia gas. The sulphate forms as salt, and falls along a sloping bottom into a well, from which it is lifted by a steam injector, and thrown into a box at the side to receive it. The acid requires to be diluted with water, and instead of fresh water the solution of sulphate made from the recovered acid is run in, and the separate evaporation of it saved. In the ammonia water from the retorts, there is fixed ammonia equal to one lb. per ton of shale, sometimes more if there is insuction of air anywhere, which is sometimes recovered by putting lime into the tower. In the water there are sulphur compounds, sulphide, sulphite, hyposulphite, and persulphides, and in the heat of the tower-still these react on each other to give free sulphur, which collects in masses and tends to choke the passage of the still. The milk of lime run into the tower assists in keeping it clear.

The author then proceeds to describe the various buildings of which an up-to-date refinery consists, and afterwards treats with the operations. In doing so, he points out that the crude oil distillation is meant to be a destructive one to some extent, and the steam admitted is limited. If the crude oil be treated directly with oil of vitriol and caustic soda, the loss is very great; or if too much steam is used in the distillation the loss with the treatments is great, as the steam drives the oil over unchanged. The distillation converts tarry or resinous matters capable of uniting with the chemicals into the required hydrocarbons. Steam is limited when near the end of the second distillation also; but when the bulk of the heavy oil and paraffin is passing over, the proportion of steam is high.

The once-distilled oil is stirred up with oil of vitriol, and settled from the black viscous tar. The oil is run by gravitation into another tank, where it is treated with caustic soda, and here another black viscous tar is separated. The settled oil is pumped up to the charging tank to the next distillation. The stirring with chemicals is sometimes done with mechanical stirrers, but oftener with air, pumped into the bottom of the tanks. At each distillation a fractionation is made—that is to say, the oil is separated into naphthas, burning oils, and heavy oils. In the crude distillation sometimes only the naphtha is separated, and all the rest distilled together as "green oil." The burning oil is left with the heavy oil and paraffin, so as to keep it liquid at a comparatively low temperature for the acid treatment, otherwise a high temperature would be required to keep it liquid, and this would cause the acid to attack the olefines. The amount of oil of vitriol used is limited for the same same reason as well as for economy. After the first treatment with oil of vitriol and soda, the next distillation separates burning oils of various gravities and the heavy oil containing paraffin. The oils vary in specific gravity in different works, and at different times in the same works, to suit the requirements of the market.

The heavy oil is cooled in shallow tanks set in sheds open to the wind, and afterwards with freezing machines. The old cooling drums dipping into the oil and paraffin, and raising a film to be scraped off at the other side, are no longer used, as they chill the mixture too rapidly and prevent proper crystallising of the solid. Ammonia machines are now always used, some beginning with ammonia solution, and others with a dry gas liquidfied by pressure. The ammonia solution machines cool a solution of chloride of calcium, which cannot be frozen by the machine, and this chilled brine is put into a tank filled with alternate compartments; wider ones for the oil and paraffin and narrower ones for the brine. The oil and paraffin lie there for hours exposed to the cold, and the solid paraffin separates out in good crystals. In the Beilby cooler, the paraffin mass lies undisturbed until chilled to the extent required. In the Henderson cooler, a scraper goes slowly round, removing the chilled mass from the cold plate and letting the warmer material forward to the cold. Some works utilise the cold more by passing the paraffin mixture through pipes chilled directly by the evaporating ammonia gas, which produces more sudden chilling, and causes some paraffin to thicken in an amorphous state difficult to separate from the oil. From the cooling machines the paraffin mass, after being broken up by machinery, is pumped through filter presses. The paraffin cake collects in the press and the oil flows into its own tank. When the cooling is done by the ammonia gas without the interposition of the brine, many more filter presses are required on account of the amorphous paraffin, at this stage it being called paraffin scale on account of the scale-like appearance of the flattened plastic-crystals.

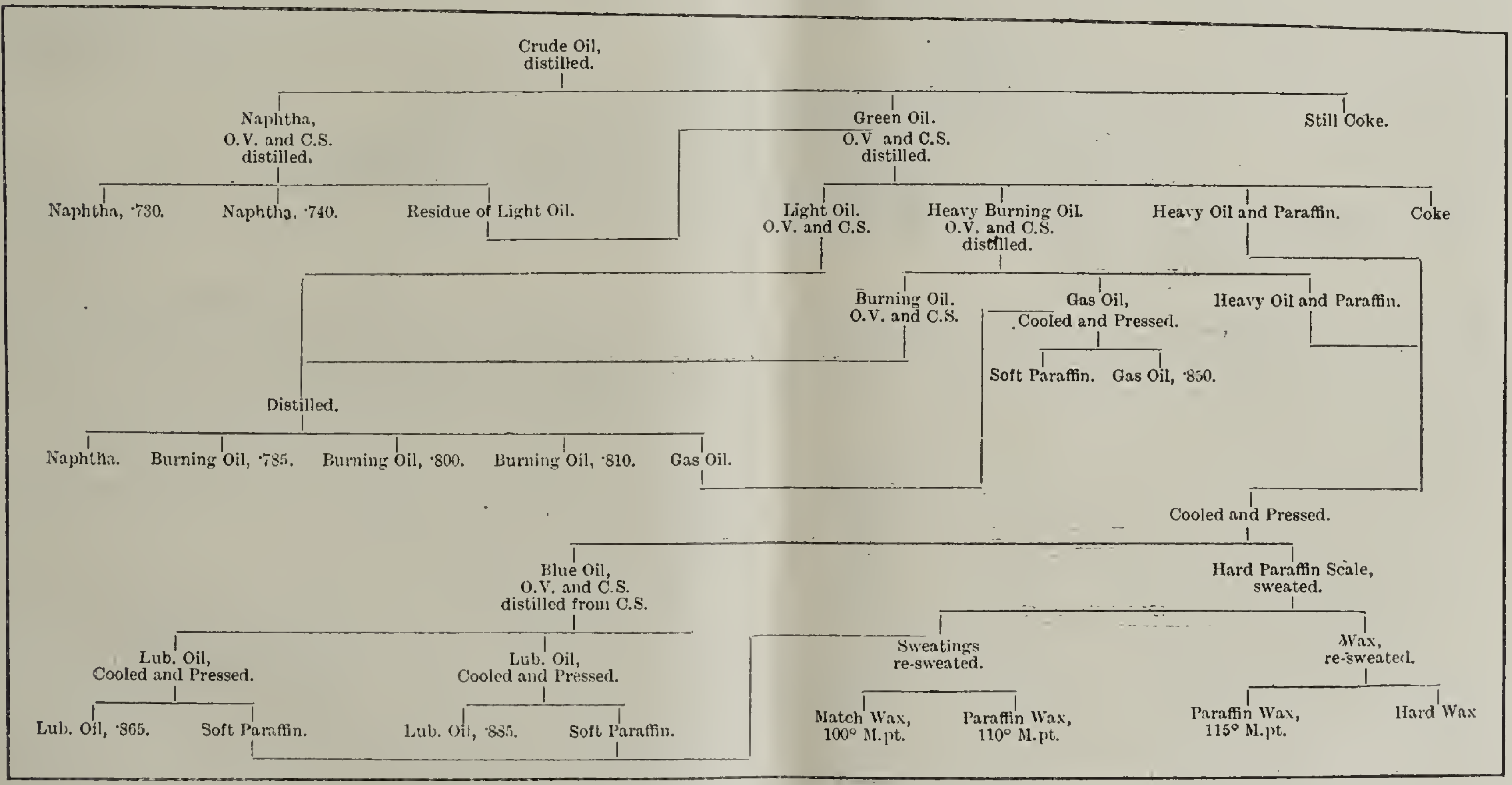


Ammonia Column Still with Two Trays.

The heavy oil, separated from the solid paraffin is called blue oil which is treated with oil of vitriol and soda, and is distilled again and separated into the various fractions according to gravity required. These, after cooling and pressing from soft paraffin, and when further treated with oil of vitriol and carbonate of soda, are ready for the market. The more thoroughly the solid paraffin is separated from the lubricating oil, the latter becomes proportionately heavier in gravity and more viscous, and the setting point is lowered.

The solid paraffins are refined by a sweating process. In some works the cakes of paraffin scale from the filter presses are now squeezed into hydraulic plate presses to separate the oil, as this process requires much hand labour, and the paraffin, with a proportion of oil, passes directly from the filter presses to the paraffin refinery. The paraffin is melted, cooled into cakes, and put on wire-gauze shelves in a house heated by steam pipes. As the temperature rises, the oil sweats out and also the softer paraffin, leaving the hard paraffin on the shelf freed from colouring matter.

The following is a diagram of refinery operations:—



DETAILS OF BAKU PRODUCTION AND BORING DURING NOVEMBER, 1906.

The following are the details of the production of crude oil at the Baku oil fields during November as published in the latest issue of the *Neftiannoie Dielo* :—

	Number of Wells in Exploitation.	Production (in poods).				Average per Well per Day.
		By Baling.	By Spouters.	Casual.	Total.	
Balakhany	642	6,300,123	—	6,125	6,306,248	330
Saboontchi	590	14,265,295	—	321,080	14,586,375	863
Ramany	190	8,126,975	908,000	53,995	9,088,970	1,699
Bebe-Aibat	198	12,322,024	19,000	—	12,341,024	2,220
Total in November, 1906	1,620	41,014,417	927,000	381,200	42,322,617	902
Total in October, 1906	1,618	42,686,595	856,000	347,785	43,890,380	900

MISCELLANEA.

THE UNION OIL COMPANY'S PANAMA PIPE LINE.

We are informed that the initial deliveries of Californian crude by the Union Oil Co. of California through their eight-inch pipe line across the Isthmus of Panama are expected to begin about the middle of next month. One cargo af oil—approximately 20,000 barrels —has already arrived at Panama, the Pacific terminus of the line, while a second cargo is now on its way from San Francisco. The line, which is over 50 miles long, is now in perfect readiness to handle the oil, and it is estimated that it will take 20,000 barrels of Californian crude to fill it. It is interesting here to recall the fact that the line was constructed in record time, and under the greatest engineering difficulties. The *Oil Investors' Journal* states that deep and slimy swamps, together with almost inpenetrable forests, were among the difficulties encountered. In one instance it required the removal of 50 tram-car loads of rock to make a foundation for one single telegraph pole.

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NEW PETROLEUM COMPANY IN GERMANY.

According to the *Bursa*, a company, under the title of Petroleum Produkte Gesellschaft, has been formed at Bremen, with a capital of 12,000,000 marks. The Deutsche Bank are taking up 3,000,000 marks of the capital, and the Deutsche Petroleum Actien Gesellschaft are taking 3,000,000 marks. The object of the company is to produce and trade in petroleum products and acquire interests in petroleum enterprises in Germany and elsewhere.

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ROUMANIAN CRUDE OIL PRODUCTION IN JANUARY.

According to the provisional statistics published in the latest issue of the *Moniteur du Petrole Roumain*, the production of crude oil at the Roumanian oil fields was as under :—

	January, 1907.	December, 1906.
Prahova District—		
Bustenari	43,297	46,997
Campina-Poiana	10,956	8,476
Moreni	20,104	21,046
Baicoi-Tinta	3,200	2,987
Other Fields	976	1,086
Total in Prahova	78,533	80,572
Dambovitza Disirict	2,524	2,571
Buzeu ,, ...	—	857
Bacau ,, ...	681	791
Total	81,738	84,791

The figures for January are incomplete, inasmuch as the production of some firms in the Prahova district and of the whole of Buzeu district are not yet included. These will probably bring the total production for the month up to about 83,500 tons. In January, 1906, the production was 58,437 tons. It is probable that February, although three days shorter than January, will shew an even larger production, thanks to the output of some rich wells in Campina, which became productive in course of last month.

The output of the leading Roumanian firms in January, compared to December, was as under :—

	January.	December.
Steaua Romana	26,844	26,347
Regatul Roman Co.	14,636	15,747
Bustenari Co.	10,626	11,298
Romano-American Co.	4,313	5,072
Sylva Co.	3,934	4,249
International Co.	3,701	3,746
Colombia Co.	3,102	3,210
Pleyte and Co.	2,614	2,614
Trajan Co.	1,709	1,572
Arnheemsche Petroleum Co. ..	1,402	1,320
Aquila Franco-Romana	1,291	1,285
Seceleanu Bros.	1,316	1,233

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A RECORD AMERICAN OIL TANKER TO BE BUILT.

Orders have been recently placed for the building of what will be the largest American oil tanker afloat. The order has been placed with one of the New York shipbuilding companies, and has to be completed at the commencement of next year. The capacity of the new tanker will be 60,000 barrels, or 10,000 barrels larger than any other tanker flying the American flag. The plans of this new tanker, which is being built to the order of the Gulf Refining Co. for the transport of its oil from Port Arthur, embody features indicative of the highest perfection in marine engineering in vessels of this class. The furnaces will be arranged so as to burn either oil fuel or coal, while wireless telegraphy will be installed, as well as recently perfected submarine signals. The new tanker will have a speed of over eleven knots per hour.

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PETROLEUM DEVELOPMENTS IN PORTUGUESE EAST AFRICA.

In an article on petroleum in Portuguese territory in South and East Africa, the *South African Trade Journal* remarks that it is generally known that prospecting for petroleum in the Inhambane district has been very successful, and that the company controlling the oil area there are putting down deep bores, and have already met with great encouragement.

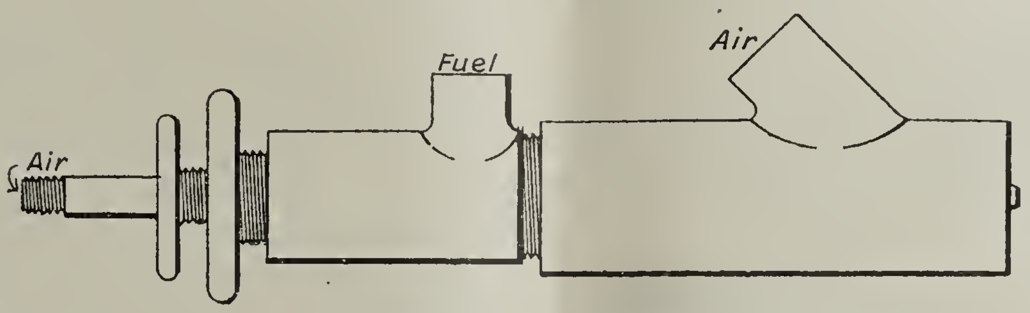
The *Lourenco Marques Guardian* has recently published an exclusive and most important report bearing on similar discoveries in the immediate neighbourhood of that port. The site of the new discoveries is Mairaqunene, a tiny village on the banks of the Incomati river, some 20 miles to the north; N'Largella, the centre of the Inhambane field, is about 200 miles further in the same direction. Work has been in progress at Mairaqunene during the past winter, but the operations were kept very quiet. It is now announced that two thick strata of oil-impregnated mineral closely resembling lignite were located near the surface, and that as far as the bore has gone (a short distance), the indications are very encouraging. The matter rests there till work can be resumed next cold season, when the borehole will be taken down to a greater depth.

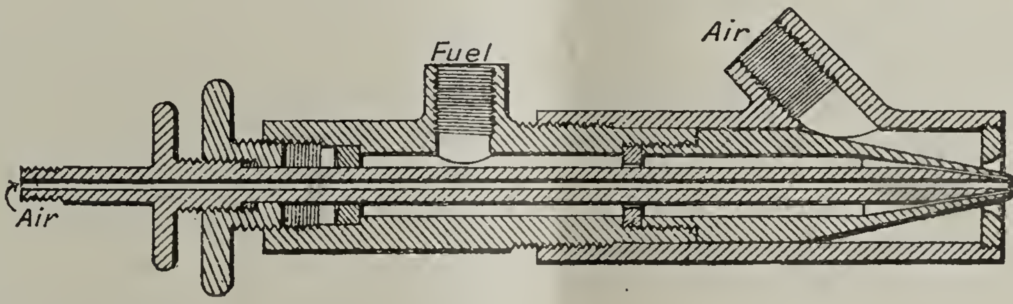
THE "CARBOGEN" OIL FUEL BURNER.

AN INVENTION THAT PROMISES TO POPULARISE THE USE OF LIQUID FUEL.

With the steady progress which is being made on all hands in regard to the use of liquid fuel for power purposes both on land and sea, it is not surprising to find that a great deal of interest is being evinced in the new oil fuel burner that has been designed and patented by Mr. S. F. Stackard (in conjunction with his staff), joint managing director of Messrs. J. A. Curle, Ltd., of South Hackney, N.E., and which to-day is being used with such success at Messrs. Curle's works at Hackney. As our readers are aware, a large number of oil fuel burners have been upon the English market for some years, while in America the number of burners which have passed through the experimental stages is almost legion.

The present invention, however (No. 13,013 of 1905), strikes out in a new line, and on account of the complete combustion which it is capable of creating, together with the strict economy of working, it bids fair to do more than any of its predecessors in the direction of popularising liquid fuel. We learn that the invention is the result of experiments extending over a period of several years. The other burners on the market were tried, and Mr. Stackard set himself the task of evolving a burner for fuel oil, by the aid of which the crudest form of oil would be given perfect combustion in order that the troublous smoke nuisance might be entirely obviated, and that carbonisation and clogging in the burner, a fault which is very prominent in the majority of liquid fuel appliances, should be avoided.





Mr. Stackard now congratulates himself that all difficulties have been satisfactorily overcome in the "Carbogen" burner which is now installed in the glass works of Messrs. J. A. Curle, Ltd., where in the furnaces, kilns and boilers about 3,000 to 4,000 gallons of oil are being consumed each week.

The new burner which is here illustrated in two sections, needs little or no explanation at our hands. It will be noticed that the air enters in two places. It comes right through the small central hole, and effects atomisation, and it reaches the atomised fuel through the larger hole just as it is issuing. The air here finds its way out through a fine annulus, and, mixing with the fuel, promotes combustion. A careful adjustment of this opening is necessary, but once effected it is permanent. The burner can be regulated down to about one-eighth of its normal consumption by the movement of the inner tube, which is actuated by a differential screw, as shewn. The air enters the burner under a pressure of from 9 lb. to 20 lb., and the oil flows in by gravity. Experiments upon a practical basis have shewn that atomisation and combustion are complete, and that there is no clogging or carbonisation of the burner.

The fact that the burners are working very satisfactorily at Messrs. J. A. Curle's works, where a very intense heat is required to bring large beds of glass to a molten state, is in itself sufficient to prove that for ordinary use, and indeed for the majority of metallurgical processes, the "Carbogen" burner is bound to make for itself an enviable name. Our representative learned from the inventor that in the burner, the consumption of fuel can be so regulated as to render the system suitable for processes as wide apart as tea drying or steel smelting, while by means of the introduction of oxygen into the flame which, with the burner, is quite simple, the highest temperature short of the electric furnace can be obtained.

We are not slow to recognise that there is one direction in which the "Carbogen" burner should play a very prominent part, and that is in regard to its suitability for steam motors and tractors. In such cases it is essential that not only shall small bulk be necessary for the fuel, but that there shall be perfect ease and simplicity of regulation. A distinct advantage, and one which is calculated to live down prejudice against liquid fuel for such road vehicles, is that no heating or vapouriser is required, for the burner can quite readily be started from the cold by means of a few revolutions of a handle similar to that with which an internal combustion engine is started.

The idea of the inventor is that a small supply of compressed air should be used for starting, and that as soon as sufficient steam pressure is generated—10 pounds is quite sufficient—the burner should then be turned over to steam, but the preferably atomizing medium is compressed air, and a small light compressor has been designed for the purpose. Two sizes of the burner are in use at Messrs. Curle's works, those of the larger size consuming 3½ gallons per hour each, whilst a small burner which is fitted to a vertical boiler, and upon which a number of tests have been made, consumed about three-quarters of a gallon per hour.

In view of the general interest which is being taken in the "Carbogen" burners, Messrs. Curle have expressed their willingness to shew the burners at work at their works to any reader of the Review who will communicate with them.

DEVELOPMENTS IN MANITOULIN ISLAND.

Writing from Manitowaning Grand Manitoulin Island, Ont., an oil well operater furnishes some interesting information relative to present and prospective developments in the northland.

It appears that at times the weather has been very cold, the thermometer registering 38 degrees below zero. The cold weather, however, has been a benefit rather than a hindrance, for the channel has been frozen over and made it possible to get in material for future development work. In winter supplies are taken from Massey, on the mainland, and it makes a haul of 50 miles to Manitowaning. All indications point to great activity on the island during the coming summer.

A new company has recently been organised and has taken over the holdings of Clinton and Wallace, and is known as the Georgian Bay Oil Co., Ltd. This company has large holdings on the Island. It has completed two wells, one good for 10 and the other good for 20 barrels a day. The first test was completed the first of January and is located on the McGillis farm, eight miles north-west of Manitowaning, and was completed February 8th. This well is two miles south-west of the Island Oil Co.'s good producer, on the Lehman farm. The Island Oil Co. is composed of Pittsburg capitalists, and possesses leases on 80,000 acres on the island.

The Georgian Bay Oil Co. is rigging up with a Canadian outfit, on the Watson farm, one-half mile east of the Lehman farm producer. One mile due west of the last named farm, the same company has started to spud with a Star drilling machine, on the Ephriam Sparrow farm. West of the Lehman farm producer 700 feet, the Island Oil Co. has moved in a Star drilling machine and will start a test, on the Watson 350 acre farm.

The Island Oil Co. is preparing to start five wells on its sub-lease of 250 acres, on the Indian reserve. These tests are located about 1,200 feet from the Huron Oil Co.'s two producing wells. The Van Vleck Co., of Toledo, has made a location in the same section.

Thirty miles west of Manitowaning and south of the village of Kagawong, the Parkersburg Rig and Reel Co. has made a location and will soon begin operations. At Gore Bay, the Lanington Oil Co. pumped its second test for 12 consecutive days and it produced 300 barrels. Their first test is a good producer, but has a string of tools stuck in it. The same company's No. 3 has been drilled in and is reported showing for a producer.

Oil operators from the oil producing States are on the ground looking the situation and prospects over.

Navigation opens during the latter part of April, when it will be much easier to get material to the island. Those who have not been inclined to wait for that time and have hauled supplies over the ice-bound channel will be able to get an early start.

The prospects all point to a very busy spring in the oil developments of the island.

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Lest we Forget—No firm can become truly great without judicious advertising. Shall we send you the Review's rates?

FEBRUARY IN THE PENNSYLVANIAN FIELDS.

HIGH GRADE OIL STILL DECLINES.

The reports of the February operations in the Pennsylvanian fields contain little of any striking information. Developement work has, for the most part, been quiet, and even an enhanced market was insufficient to maintain production at its old level.

The recent advance would of course tend to revive an earnest endeavour to search for good territory, but the results which past searches have brought about are not very gratifying in this respect.

In the districts producing high grade oils, the month shewed a decline in new wells and new production, accompanied by a small gain in field operations.

New developments in the Trenton Rock oil fields of Ohio and Indiana made a decided gain although there was another drop in wells completed and new production. The same scarcity of territory is in evidence that is noticeable in Pennsylvania and West Virginia. The wells completed during the month dropped to their lowest ebb and the new production was 119 barrels below that of January. The general decline in field activity is due to the scarcity of desirable territory and the general exodus of Buckeye and Hoosier operators to the more prolific territory of the Sucker State. Abandoning old wells and transferring the junk to the new oil districts in Illinois continues to be a feature of field development. The number of wells abandoned in the Trenton Rock fields exceeded the number of new wells completed by 33.

The new production of high grade oil during the month declined to 2,341 barrels, the smallest amount on on record in many years. The average yield of the new wells was about 9·7 barrels, which is much above the general average for several months past. In February a year ago, 398 productive wells had an average yield of 8⅛ barrels to the well.

A large gain in the number of wells completed during February was reported in the Illinois oil fields and everything points toward an active cámpaign for the drill as soon as weather conditions are more favourable. An immense area of available territory is in sight, and with improved pipe line facilities, the producer will rush the oil out of the ground as rapidly as possible. There were 356 wells completed in the Illinois oil field in February, including 55 dry holes, and the new production was 9,842 barrels. This was a gain over January of 103 wells completed, 409 barrels production and 14 dry holes.

On the last of February the list of new work shewed 88 rigs and 322 wells drilling, a total of 410. This was a decline of four rigs and 29 wells drilling from the January figures, or a net decrease of 33.

◆

ENGLISH PATENT.

Improvements in Oil Separators.—Aksel Edward Andersson, Liverpool. (Date applied for under Patents Act, 1901, 13th March, 1906, being date of application in Sweden). No. 6117 of 1907.

RUSSIAN AND ROUMANIAN NOTES.

Baku Production.—The total production of crude oil at the Baku oil fields in February amounted to 37,582,896 poods.

Navigation Re-Opening.—A report from Astrakhan, dated the 19th March, states that ice on the Volga there has begun to break up. All negotiations *re* the sale or carriage of residuals have ceased.

For the Indian Markets.—On February 21st, the steamer "Washington" left Constantza for India, with a cargo of 5,433 tons of refined oil, shipped by the Aurora and Romano-American Companies.

Rental of Government Lands.—The Russian Ministry of Commerce and Industry has, in accordance with the provisions of the mining laws, fixed the rentals for Government lands taken up for prospecting for petroleum in the Caucasus for 1907 at five roubles per dessatine.

Campina Again to the Front.—The production of crude oil in Roumania has increased lately by the striking of some prolific spouters at Campina. The most prolific of these wells has been producing as much as 500 tons per 24 hours. Some rich strikes of oil are also shortly expected at Baicoi, the indications being very favourable.

To Exploit for Petroleum.—The Caucasian Mines Bureau has granted permission to Mr. I. Nazaroff to commence the exploitation of petroleum on a plot of land belonging to him, and situated near the village of Nevinnomysskaia in the Batalpashinsky district of the Kuban Province on the Caucasus, and having an area of 5,671 acres.

Crude Oil Stocks.—The stocks of crude oil at the Baku oil fields on the 1st January, 1907, amounted to 7,754,941 poods. The stocks of various oils at the refineries on the same date were: Crude oil, 18,220,533 poods; illuminating oil, 7,630,011 poods; lubricating oil, 3,167,436 poods; residuals, 42,028,946 poods; other products, 777,113 poods; total stocks at wells and refineries, 79,578,980 poods.

More Baku Strikes.—A telegram from Baku, dated the 18th of March, states that strikes were then in progress on the properties of Benkendorp and of the Caucasian Co., and also at the electric power generating station at Bebe-Aibat. The stoppage of work at the electric power station caused the stoppage of work on eight properties, which are operated by electricity.

A New Company for Roumania.—A company has just been formed in Berlin, under the title of Valeni Naphtagesellschaft. The capital is 240,000 marks, of which the vendor, Mr. F. Leschnitzer takes 230,000 marks in shares as purchase consideration for the property, consisting of 181 acres of land at Valea Lupului, near Ploesti, and 155 acres at Valea Gardului, near Predeal. The capital is to be shortly increased to 360,000 marks.

The Batoum Oil Market.—A report from Batoum, dated the 3rd March, says that the oil market there is again depressed owing to the small demand for kerosene in bulk and the closing of the Mantascheff case oil works in consequence of the fire. A steamer which arrived to load 180,000 cases from the Mantascheff works had to go back empty. The charter party for this cargo was annulled, both sides recognising that the fire constituted a *force majeur*.

Messrs. E. A. Egiasaroff and Co., owners of a freehold petroleum property at Balakhany, pipe line from Balakhany to Black City, and a refinery in Black City, near Baku, have during their fifth financial year, 1905, incurred a loss of 77,802 roubles, which brings the total loss to date up to 127,558 roubles. The nominal capital is 2,000,000 roubles. The properties are valued at 2,046,916 roubles. The loss from the fires in August, 1905, amounted to 32,125 roubles.

The Roumanian Refiners' Cartel.—The negotiations among the Roumanian refiners for the conclusion of a fresh cartel for the home market have not so far made much progress. The Romano-American Co. does not seem to be disposed to enter the cartel. The Vega Co. is of the opinion that the cartel can be concluded without the Romano-American Co., and insists that a decision be arrived at promptly, so that in the event of a negative issue the refiners may be able to make their arrangements in good time.

BAKU PRODUCTION AND AVERAGE PRICES DURING FEBRUARY.

The total production of crude oil at the Baku oil fields in February amounted to 37,582,000 poods, of which 2,900,000 poods were supplied by spouters.

The production of the leading firms during the month was as under:—

	Poods.
Nobel Bros.	5,000,000
Caspian and Black Sea Society	3,000,000
Zoubaloff	2,200,000
Caspian Society	2,100,000
Baku Naphtha Co.	1,900,000
Pitoeff and Co.	1,600,000
Moscow-Caucasian Co.	1,500,000
Mantascheff and Co.	1,100,000
Schibaieff Petroleum Co., Ltd.	1,000,000
Baku Russian Petroleum Co., Ltd.	900,000
Russian Naphtha Co.	900,000
Naftalan Co.	800,000
Bibi-Eybat Petroleum Co., Ltd.	800,000
Russian Petroleum and Liq. Fuel Co., Ltd.	700,000
Mirzoeff Bros.	600,000
Nagieff	600,000
Aramazd Co.	500,000
Shikhovo Co.	500,000

According to official figures of the Baku Exchange Committee the average prices of petroleum products at Baku in February, based on the deals concluded on the Baku Oil Exchange during the month, were as under:—

	Copecs per pood.
Light Crude in Black City	26·2
Residuals in ships	27·8
Kerosene in waggons	27
Kerosene in ships	28

In the first week in March (o.s.) prices have further advanced; crude oil was sold at 28 copecs, residuals at 29½ copecs, whilst buyers of kerosene in waggons paid as much as 32 copecs per pood.

MOVEMENTS OF PETROLEUM PRODUCTS IN DUTCH PORTS DURING FEBRUARY.

The following were the movements of petroleum products in Dutch ports during February:—

	Amsterdam. Barrels.	Rotterdam. Barrels.
Stock on 1st February	27,013	34,139
Imports in February	28,814	134,734
Deliveries in February	34,131	145,257
Stocks on February 28th	21,696	23,616

A NEW ENGLISH COMPANY.

SOUTHERN CALIFORNIAN OIL SYNDICATE, LIMITED.

Capital, £25,000 in £1 shares (5,500 Deferred). Objects: To adopt an agreement with W. Shyvers; to prospect, explore and develop any lands, wells, mines, rights, minerals, ores and other properties, and to carry on the business of producers, storers, suppliers, refiners, and distributors of petroleum and petroleum products in all its branches. No initial public issue. The first directors (to number not less than two nor more than nine) are: J. Chapman, E. E. Head, T. H. Hilken, M. Mowat, and W. Shyvers. Qualification, £100 shares or stock. Rumuneration, as fixed by the company. Registered office, 20, Eastcheap, E.C.

THE GULF OIL CORPORATION.

HOW THE GULF PIPE LINE HAS BEEN MADE POSSIBLE.

The Gulf Oil Corporation, with a capital stock of $15,000,000, divided into shares the par value of $100 each, and with an authorised issue of $15,000,000 of first mortgage bonds, has been incorporated under the laws of New Jersey, to serve as a holding company for the stocks and bonds of the J. M. Guffey Petroleum Co. and the Gulf Refining Co., representative of the Mellon interests, of Pittsburg, in Texas and Indian Territory.

The incorporation of the Gulf Oil Corporation follows out a plan set forth in a circular letter to the stock and bondholders of the Guffey and Gulf Companies last October, to enable the construction of an eight-inch pipe line from Indian Territory to the Gulf of Mexico, work on which is already under way. It was proposed that both the bonded and floating debt of the Guffey and Gulf Companies (excepting $190,000 in Car Trust certificates) be converted into capital stock of the new corporation, the stock being taken at its par value for the face amount of such indebtedness, interest thereon to December 1st, 1906, to be paid in cash, each five shares of the Guffey stock of the par value of $100 each to be entitled to one share of the new corporation stock of the par value of $100 each, and each 16 shares of the Gulf Refining Co. stock at the par value of $5 each, to be entitled to one share of the new corporation stock of the par value of $100 each.

The J. M. Guffey Petroleum Co., as our readers are aware, is a Texas corporation, owning and operating producing territory in Texas, with a capital stock of $15,000,000, divided into shares of the par value of $100 each, and has a bonded debt of $5,000,000, first mortgage 5 per cents, maturing at the rate of $500,000 each year, beginning June 1st, 1907. The Gulf Refining Co. is also a Texas corporation, with a capital stock of $750,000, divided into shares of the par value of $5 each, and a bonded debt of $750,000 of first mortgage 5 per cent. gold bonds, maturing at the rate of $75,000 each year, beginning June 1st, 1907. The floating debt of the Guffey and Gulf Companies is approximately $2,600,000, not including $190,000 in Car Trust certificates already mentioned.

The $15,000,000 of bonds of the new corporation, say the *Oil Investors' Journal*, are to be first mortgage and collateral trust 6 per cent. gold bonds, and are to be secured by first mortgage upon such property as the corporation may own directly, and, by means of proper collateral trust provisions, by the deposit of the bonds and shares of stock owned by the new corporation. Of these new bonds it is estimated that about $7,000,000 will be required for the purpose of providing the funds necessary for the construction or acquisition of the pipe line to connect the Indian Territory fields with the existing pipe lines of the Guffey Co., providing the necessary tankage in connection therewith and additional working capital.

The remainder of these bonds are to be reserved, with such restrictive provisions in the mortgage securing the same, that they can be issued only with the approval of the trustee under the mortgage, and only for the acquisition of additional property, adding to the properties of the company an amount in value at least equal to the amount of bonds so issued.

The recent incorporation of the Gulf Pipe Line Co., with a capital stock of $3,500,000, and an authorised bond value of $3,500,000, was a part of the plan outlined in the circular letter. All the stocks and bonds of this corporation, excepting such number of shares necessary to qualify officers and directors are vested in the Gulf Oil Corporation.

THE ANGLO-RUSSIAN PETROLEUM COMPANY, LIMITED.

ANNUAL MEETING OF SHAREHOLDERS

The fifth annual meeting of the shareholders of the Anglo-Russian Petroleum Co. was held at River Plate House, E.C., on Tuesday afternoon, Mr. Philip Poore presiding.

In moving the adoption of the report of the directors (which appears on page 186 of this issue) and also the accounts, the Chairman said that inasmuch as development upon the company's property had practically been suspended throughout the year, it was unnecessary for him to detail the shareholders by making lengthy reference to the operations. The shareholders would see from the report that the geological survey had been completed as far as the directors deemed advisable. He had been asked by some if it was wise to continue the company in view of the little practical success it had hitherto met with, but the board believed that there could be little doubt upon that point. The result of the survey had been to shew an anticlinal fold passing over to the west of the No. 4 well, which struck oil and on several occasions yielded 1,000 poods of oil in six hours, but on account of the small diameter the sand choked it, and the well had to be abandoned. Therefore they had evidence that on their ground there was a stratum of paying oil. Turning to Berekei, the producing wells were on Benkendorff's plot and Nobel's ground. A line joining those places passed through the anticline, so that altogether there was a good deal of evidence that they had good payable oil strata on their property. In view of the fact that they had the same anticline at Berekei, the success of that field became of great importance to them.

The speaker then proceeded to read extracts from letters from the company's manager with regard to the developments proceeding there, and remarked that the price that plots at Berekei had realised was from £50 to £200 per dessatine, and if there had not been some failures in the wells that price would have been much higher. Their company had nearly 3,000 dessatines, so that the amount at stake amply justified them in continuing. Mr. Poore concluded by moving the adoption of the report and accounts, this being seconded by Sir Hardy Pelly, Bart.

Mr. R. Whieldon Barnett enquired with respect to the agreement with Mr. Adiassewich, and said that he did not quite see the point in the remark of the directors. If they had an agreement with an engineer which they could not get out of, why advertise the fact to the world?

The chairman said that it was obvious that the company had to reduce its expenses to the uttermost but in the case mentioned, there was an expense which they could not possibly reduce, and so the directors thought it wise to set that clearly before the shareholders.

The report was agreed to and the meeting terminated.

THE UCHTA PETROLEUM DISTRICT.

We have from time to time published brief accounts of the oil fields on the Uchta river, a tributary of the Petchora, in the Northern Ural. The *Neftiankoie Dielo*, in its latest issue, publishes a number of details concerning the same, taken from the report of Mr. J. Bieloborodoff, the leader of an expedition of exploration, fitted out by private capitalists.

Mr. Bieloborodoff explored the petroleum deposits in the Petchora district of the Province of Archangel along the river Uchta and its tributaries, the Tchute, Krochal, Perd-Yoll, Neft-Yoll, Polovin-Yoll, Yarega, Domanik and in the Ust-Sysolski district of the Province of Vologda, along the rivers Lya-Yoll, Vezhi-Vozh and their tributaries.

From the scientific point of view the petroliferous nature of the Uchta basin was established in 1834 by Count Kaiserling, mining engineer, Mr. Romanovsky and Mr. Barbot de Marny, and in 1889 by a special Government commission under the guidance of Mr. Tchernyshev, the academician.

This expedition, contrary to expectation, created a check on the development of the petroleum industry on the Uchta, as the Government declared the whole region as "proven petroliferous" and thus the whole of it became closed to private enterprise.

Natural petroleum outcrops are very plentiful, and, in the author's opinion, they are more pronounced than in the Baku district. The oil either oozes out from the beds of rivers and floats on the surface of water or flows from the ground in the form of springs.

The specific gravity of Uchta petroleum is lighter than of Baku oil, and in the yield of illuminating oils it resembles American crude oil. A characteristic feature of the Uchta petroleum deposits, which brings them more closely to the American deposits, are the marly clay schistous sandstones, impregnated with petroleum. Cracking from the escaping petroleum gases after it is burnt, it forms a white mass apparently suitable for making mortar.

Another characteristic and very favourable feature of the Uchta petroleum deposits are appearances of sulphur, which always accompanies petroleum, either in the form of sulphurous water in the boreholes, sulphur spring or as solid sulphur. Sulphur is also found there in combination with metals such as iron, copper and gold in the form of sulphurous ores. These sulphurous ores are apparently suitable for the manufacture of sulphuric acid, which is an indispensable article for the refining of petroleum, and for the manufacture of which in Russia at present it is necessary to import sulphur ores from Spain and Italy.

The trial borings made so far were carried down to a depth of 175 to 210 feet. All the trial boreholes, which had a diameter of 4 inches, produced oil, and some also gases.

As to the depth to which it would be necessary to sink boreholes for exploitation it is at present impossible to say anything definite for want of reliable data. The local representative of the Mines Department, the Government district mining engineer, estimates this depth at 420 to 525 feet, but as for the trial borings rather low lying places were selected, it would be more correct to take the depth of the first paying oil stratum at 700 feet.

Mr. Bieloborodoff is of the opinion that Uchta petroleum would be able to compete successfully against Baku throughout the whole of Northern Russia right down to Moscow, along the Kama, the upper reaches of the Volga to Kazan, in Siberia and for foreign export, the indispensable condition being the improvement of the means of communication, construction of pipe lines, etc.

According to his calculations the cost of delivering Uchta petroleum to St. Petersburg would be from 10·66 to 14 copecs per pood against 16½ to 19 copecs for Baku oil; to Perm—Uchta oil, 5·98 copecs; Baku oil, 9 copecs, etc. For these calculations the water transport rates for Uchta petroleum were taken as being two and a-half times higher than the rates for Baku oil. With the development of shipping on the northern rivers this difference will disappear. Another factor in favour of Uchta oil is that the cost of production there is much cheaper than at Baku, and concessions are granted on the claim principle against a payment of 10 roubles per dessatine (8 shillings per acre). For prospecting, the Government grants plots of 101½ acres, and for exploitation, plots of 27 acres. Mr. Bieloborodoff estimates that the testing of a prospecting plot by trial boring for each borehole ought to cost about 1,000 roubles (£100), exclusive of management expenses.

Now the Uchta petroleum deposits have been opened to private enterprise, and in 1905 there was quite a rush of oil prospectors to the district, who have taken up the largest part of the petroliferous lands. Lately a great desire has also been shewn by foreign capitalists to acquire interests in the Uchta petroleum fields.

In connection with the foregoing, the *Trade and Industry Gazette* announces that quite recently a company has been formed in St. Petersburg for the purpose of exploring and exploiting the Uchta oil fields. The capital required for starting the business is 500,000 roubles, which are already provided, and it is proposed to start very shortly drilling wells to a depth of 1,400 feet. The founder is a certain Mr. Voronoff.

OPERATIONS OF THE DUTCH-INDIAN PETROLEUM COMPANIES.

The production of refined oil by the Royal Dutch Co. in February amounted to 732,800 units, against 813,600 units in January. These figures include the output of the refineries of the Sumatra-Palembang Co. and of the Mœara-Enim Co.

The output of refined oil by the Dordtsche Petroleum Co., operating in Java, in February amounted to 151,000 cases against 168,000 cases in January.

The output of refined oil by the Mines, Forests and Land Exploitation Co., of Langkat, Sumatra, in January amounted to 203,185 units, against 195,106 units in December. The total output of refined oil in 1906 was 2,118,887 units, against 1,896,077 units in 1905.

AMERICAN NOTES

Transfer of Leases.—The Natural Gas Co., of West Virginia, has recently acquired additional acreage, and it is proposed to test these 5,000 acres during the coming summer.

The Tilbury Field.—Work has been suspended upon the Tilbury field, in Canada, for some weeks owing to the cold weather. As soon as better atmospheric conditions prevail the number of rigs at work will be increased by hundreds.

Prospective Extensions in Kentucky.—There are hopes of a strong revival of operations in the Kentucky fields during the spring, for many operators are to try their luck at the foot of the Cumberland hills and along the edges of the producing areas in the hopes of bringing about an extension.

In Saratoga.—The production of the Saratoga field is looking up. During February 12 wells were completed, all of which are producers, their estimated yield being about 6,000 barrels. The total output of the district is now about 10,000 barrels daily, which is an increase of over 3,000 barrels as compared with the total output a month earlier.

A Pipe Line Record.—Coming events cast their shadows before. The Prairie Oil and Gas Co. has recently increased its facilities in the Mid-Continent fields, and on Monday, February 25th, it handled in a single day no less than 109,077 barrels. These runs were without doubt the heaviest ever handled in 24 hours through one single system.

To Amend the Canadian Oil Bounty.—A bill to amend the Canadian Petroleum Bounty Act has been recently introduced. This measure is to give the Governor-in-Council power to make such regulations as will ensure that the farmer who owns the oil land shall receive 1½ cents. per gallon of the oil produced, as well as the leasee who produces the oil.

A New Gas Field.—A new gas field has been opened in Potter county where the Cummings Oil and Gas Co are operating. This company has 4,000 acres under lease surrounding the well which has just been brought in at a depth of 1,500 feet, and since this success have secured several other farms. The output of the well, according to latest information, is still 600,000 cubic feet per day.

Humble Territory.—The Humble field which created so many wonders about two years ago, has dropped down to a territory of quite average value. The production now of the whole territory which once produced as much as 150,000 barrels daily is less than 8,000 barrels daily, and of the seven completions during February, four of them were dry holes. The Texas Co. is by far the largest producer.

At Caddo.—Things are fairly quiet at Caddo Lake in North-western Louisiana. The Pine Island discovery well is still producing about 50 barrels daily, and the No. 2 well is yielding a similar quantity, while a third well, which went to a depth of 1,400 feet is producing 75 barrels a day. The blowout well on the east bank of Caddo Lake has been continuing for over a year and is still as bad as ever.

To Relieve the Congestion.—A communication from Tulsa, Oklahoma, states that the Prairie Oil and Gas Co. (the western branch of the Standard) has closed a contract for the running of a daily train of oil from the Glenn pool to Beaumont, Texas, where the Standard Oil Co. maintains a large refinery. This is the first train taking oil from the Glenn pool to be put in operation by the Standard. The train will be started about the beginning of April.

Mid-Continent Field Leases Cancelled.—A general surprise has been created as a result of the decision of the Washington Interior Department to cancel a large part of the Barnsdall leases on the Osage Nation. The reason assigned for the cancellation is that the leases were taken in the names of dummies. It appears that when the Osage lease to the Indian Territory Illuminating Oil Co. was extended for a term of 10 years upon 680,000 acres, it was with the understanding that the extension was only on *bona-fide* leases entered into or contracts made for lease prior to January, 1904. It is now claimed by the Interior Department that a large part of Barnsdall leases were taken in the names of other persons and turned over to Mr. Barnsdall to avoid the limitation provision and for this reason they are now cancelled.

MOTOR MATTERS.

Compiled principally from details furnished by the Secretary of the British Empire Motor Trades Alliance.

During the first nine months of 1906, the United Kingdom shipped £44,000 worth of motor cars to South Africa, a considerable advance over any previous year. For use on the Rand a car on general touring or run-about lines is, of course, the most suitable, but for use on roads which intersect the veldt, and on the veldt itself, special features of construction, such as extra strong springs and well-raised bodies, to admit the "negotiation" of spruits and water courses, are essential.

*

A visit to the leading automobile agents in Johannesburg and an inspection of their interesting stocks has suggested to us the possibility of a local exhibition of motor vehicles of all sorts. The proposal may or may not commend itself to the agents—we make it for what it is worth.

*

Mr. Henry Sturmey, of the Duryea Works, Coventry, writes to say that consequent upon his having purchased the business of the Duryea Motor Co., he has now transferred the undertaking to a new company, under the title of "Sturmey Motors, Ltd.," the registered capital of which is £60,000. The whole of the capital required has been subscribed privately, and there will be no public issue of shares. He is being joined on the board and in the management by Mr. Ernest Groves, and in addition to the Duryea models the company is introducing an entirely new series of models termed "The Lotis," which, whilst conforming broadly to the accepted practice of the day, will contain many detail refinements and improvements. The firm is also introducing a four-cylinder model on Duryea lines with a V engine, and rather more power than the three-cylinder Duryeas.

*

A syndicate has the scheme in hand for the immediate revival of the "Itchen Navigation." The necessary money is forthcoming, and it is expected that in a few months vessels will be seen on the river Itchen as far inland as Winchester. The promoters intend to have motor traffic, and in the season pleasure boats will be run from Southampton to Winchester, as the Oxford boats do on the Thames. The heavy traffic will be drawn by 60-ton motor barges, each towing three 100-ton barges.

*

The Army Council have approved of a scheme of registration of a limited number of self-propelled vehicles for purchase in time of war and for hire during peace, on the lines of the present scheme of registration of horses.

*

Following the wet weather, the Parsons Non-Skid Co., Ltd., report that they have been overwhelmed with orders for non-skids, including an urgent command from Sandringham for four sets for H.M. the King's cars.

*

The Hon. C S. Rolls' visit to the States has been very successful. He sold six cylinder Rolls-Royce cars to Commodore Bourne, a governor of the Automobile Club of America, who is reputed to own about ten different cars; Mr. Jefferson Seligman, the well-known banker and one of the pioneers of automobolism in the United States; Mr. Campbell Clark, head of the great cotton concern known as the Clark Thread Co.; and Mr. Percy Furber, head of the Mexican Oil Fields, Ltd.

*

The *Diario* contains a copy of a law authorising the "Sociedad Paraguaya de Trasportes" to import, free of duty, for the term of ten years, automobiles and fuel for automobiles, such as benzine, gasolene, petroleum, etc.

*

The British Empire Motor Trades Alliance, Ltd., is informed by a correspondent in Kingston that Jamaica and the West Indies generally form a hitherto untapped ground for motor cars, and that British makes especially would find a good market there.

*

The 40 horse power Rylmield motor bus, which is undergoing a prolonged trial for the London General Omnibus Co., Ltd., has completed, so far, a mileage close upon 2,000 miles. No journey had, up to the time of our last report, been lost, whilst the number of miles per gallon of petroleum spirit had averaged seven. The consumption of lubricating oil has been only one gallon for each 18 miles, and that of grease 1 lb. for each 109 miles.

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THE OIL FIELDS OF RUSSIA AND THE RUSSIAN PETROLEUM INDUSTRY.

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Saturday, March 30th, 1907.

LIQUID FUEL PROSPECTS IN THIS COUNTRY.

NOW that liquid fuel is everyday occupying a more important position as a fuel throughout the various empires of the world, it is an opportune moment to look around and seriously consider what prospects there are for the more general adoption of the new fuel in this country.

From the time—now many years ago—when a number of the large oil tankers commenced their ocean journeys on liquid fuel, and almost simultaneously one of our great railway systems adopted it upon many of the express trains, oil has received not an inconsiderable amount of attention on the part of various manufacturing firms in this land. Without one exception, experience has proved that for industrial purposes, as well as for locomotive and marine use, liquid fuel possesses many distinct advantages over coal, with which phase of the subject our readers are already familiar, yet in spite of this, in England, its progress toward more general adoption has indeed been slow. Possibly the advent of the new fuel was somewhat premature in this country, for it commenced to take its place as a motive power long before there were anything like the necessary facilities for its proper and systematic transport to our shores, and the consequence was that after a time the difficulty of securing anything like regular parcels was such that placed oil fuel at a very great discount.

Then, too, its constantly fluctuating price acted most adversely, and deterred progress in many directions, while eventually it reached such a figure as to not only prevent its extension, but to minimise the number of firms who had already been won over to its use. From that period to the present day, so far as commercial England is concerned, liquid fuel has practically occupied the same position: it is used only in those circles where the question of cost is of secondary importance. Thus it comes about that in quite a number of smelting works, glass manufactories and other centres of industry, where a fuel power which is capable of giving intense heat is required, there it is that we find liquid fuel holds sway. But in the larger circles of industries throughout our land, liquid fuel has experienced little or no grogress, and to-day our coal resources find the same unlimited field at home as they ever did.

But the general aspect of the question has totally changed of late, and, even as coming events cast their shadows before, we see signs on every hand of the determined attempt which is being made to introduce liquid fuel, so that it may occupy a more popular place as a factor in our motive powers. The British Admiralty has gone a long way to assist liquid fuel to gain a strong foothold in this country, and the events that have transpired during the past few months have transformed fancy into fact, although even now much work lies before those energetic workers, among whom is Sir Marcus Samuel, before liquid fuel will become a commonplace commodity in the various sections of our industrial life.

Our Navy will in future very largely depend upon liquid fuel, and to this end, large contracts have been placed in order to ensure an adequate and continuous supply of the fuel at various spots round our shores. In this direction alone, we have every reason to look forward to a large trade being done in the new fuel, but what concerns us more is the possibility of oil entering more keenly into opposition with coal in this country.

Ere this can be brought about, that obstacle of cost has, of course, to be surmounted. If liquid fuel can only be secured at a price even at which it stood say four years ago, then without doubt, the march forward will be most marked and continuous. But, for the present at all events, this is almost out of the question. What time may bring in its train, we can only prophecy with some degree of indefiniteness, but it certainly does seem that when the various "boom" periods which are being experienced in not only the countries producing heavy oils, but in the new channels abroad in which liquid fuel is finding application, there are signs which give rise to the hope that oil fuel prices may come down to that level (still a profitable level) when there will be some inducement for our mammoth industrial hives to go forward with its more general adoption.

During the past few months the great engineering feat which has been accomplished in Central America—we refer to the laying of the pipe line across the Isthmus of Panama—has brought nearer the time when we may look forward to liquid fuel playing a more important part in this country. California has in the past been shut out from the European markets with its fuel oil, and the necessity which has existed for an extension of the demand for the oil of California has, from year to year impressed itself upon those directly interested in the production of petroleum more and more. Now, however, a different state of things prevails, and already fuel oil flows in an unbroken stream through the pipe from the Pacific to the Atlantic. We do not want to anticipate events, but our readers will see the significance which attaches to this system of economical transportation, and which brings enormous quantities of liquid fuel from California only a few days' journey from our shores.

For a solution of the liquid fuel problem we look to Roumania with every degree of prospective success. Her prolific petroliferous territories are to-day being developed with a zeal typical of the palmy days of some of the Texas fields, and it is a foregone conclusion that though for the present the necessity has not become urgently manifest, if Roumania's production increases in the proportion it has done during the past year or two, the establishment of an extensive export liquid fuel trade will be inevitable. In this respect England is favourably situated, and it is more than likely that Roumania will soon find its residuals being turned to good account in this country.

In the meantime, we would only say that though liquid fuel has not made that advance in the United Kingdom one could have wished, it is by no means a dead project; true it is, that time has passed without any appreciable advance being recorded, but it is also true that the not far-distant future has in store such progress of oil fuel in this country that even its most ardent supporters will be pleasurably surprised.

THE ROUMANIAN DISTURBANCES AND THE PETROLEUM INDUSTRY.

The Roumanian disturbances have commenced to have an effect for ill upon the petroleum industry. At the time of writing signs of dissatisfaction have begun to shew themselves in the Prahova districts, where the oil fields are situated, and the local authorities have taken all precautions to prevent and suppress open disturbances.

From Bustenari comes the rather gloomy news that a meeting of workmen has taken place, at which demands have been formulated to be presented to the employers.

THE LONDON AND THAMES HAVEN OIL WHARVES, LIMITED.

NINTH ANNUAL MEETING.

The ninth annual meeting of the shareholders of the London and Thames Haven Oil Wharves, Ltd., was held at the Baltic, St. Mary Axe, E.C.. on Wednesday, the 20th inst.—Mr. Owen Philipps, M.P., taking the chair.

The report of the directors, which was taken as read, stated *inter alia* :—

The dividend on the preference shares for 1905 was paid on the 15th July, 1905, and 15th January, 1907, and after writing off depreciation and carrying £1,500 to reserve, the directors out of the available balance recommend that for the year ending 31st December, 1906, a dividend on the ordinary shares at the rate of 8 per cent. per annum be declared, and that the balance of £1,742 19s. od. be carried forward.

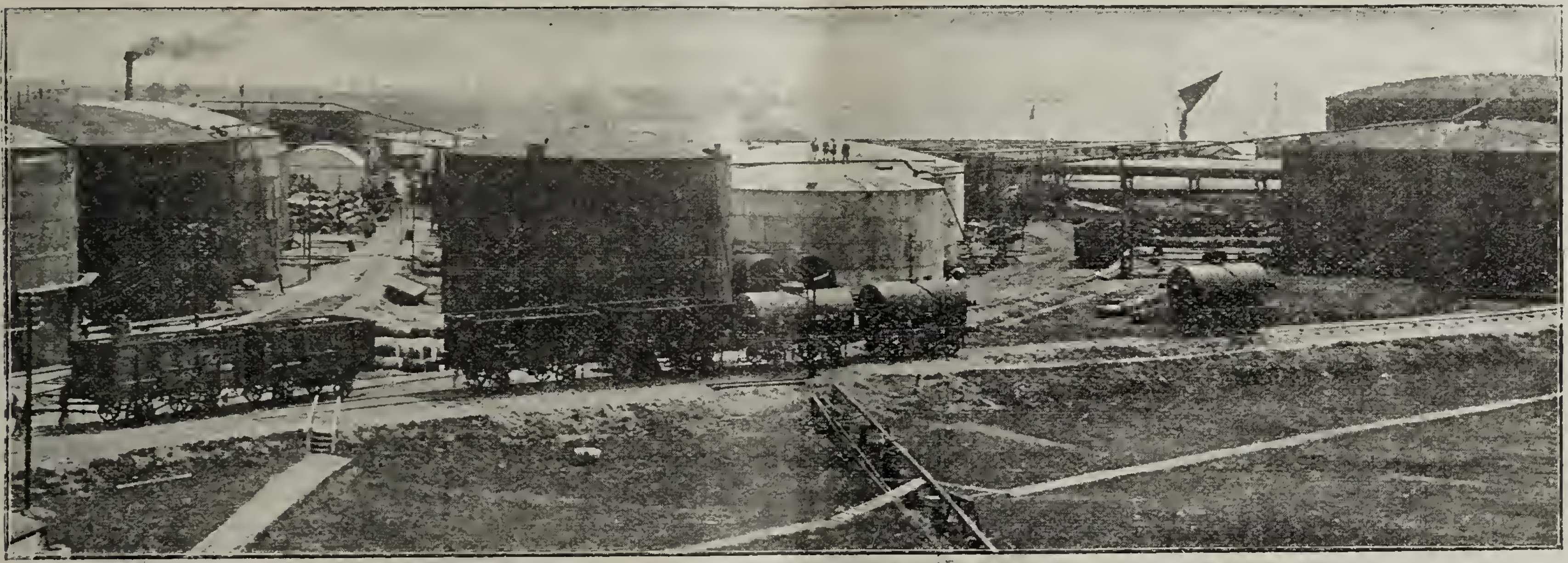
A payment at the rate of 5 per cent. per annum for the six months ending 30th June, 1906, was made in advance of the above dividend, and this amount will be deducted from full dividend when paid.

The company's works have been maintained in good order, and the cost of upkeep and renewals has been charged to revenue.

The company's business during 1906 shews that the effect of the general depression from which the oil trade has been suffering for the last two years is passing away, and the board are pleased to be able to report that the trading again shews signs of improvement.

Mr. Owen Philipps, a director, retires by rotation, but is eligible, and offers himself for re-election.

The Chairman, in moving the adoption of the report and accounts, said : –The accounts for the year 1906 are of a very satisfactory nature. We are able to recommend to you a dividend at the rate of 8 per cent., and this makes, for the eight years that I have had the honour of being your chairman, an average dividend of about 8 per cent per annum. This is a great improvement over the previous year, as the depression through which the oil trade was then passing is now happily clearing away. During the past year we have carried out the board's consistent policy of meeting the requirements of the oil trade, and in order to do so, we have during last year spent no less a sum than £25,000 on capital account. Our forward policy, I think I may say without fear of contradiction, has not only given satisfaction to the customers of the company, but, as you see from the dividend we are able to recommend to-day, it has been justified by the results. The demand for petrol has been steadily increasing, not only for motor 'buses and for private motor cars, but also for general commercial purposes, and there has been a very large increase in the amount of petrol imported into the country. The demand for motor launches is still comparatively small; but I believe there is very considerable room for extension in this direction, and I was pleased to hear, when I was attending a meeting of the Royal Lifeboat Institution on Saturday last, that the motor lifeboats were giving great satisfaction. During the past year our No. 1 pier at Thames Haven was badly damaged, and it will require extensive reconstruction. I am pleased to be able to tell you that we collected the value of the damage from the underwriters of the steamer which ran into the pier, and we are now making arrangements for the reconstruction of the pier on improved principles, so as to eliminate the fire risk. During the year, also, we built No. 3 pier. This new pier we built as an extra facility in dealing with increased shipping, and also to prevent the possibility of interference with our business in the event of another accident to one of our piers. Now, with reference to the prospects of 1907, I am pleased to be able to tell you that the business of the first three months of the year is quite equal to that of the first three months of 1906 ; so that I hope when we meet next year we may again have a satisfactory balance-sheet to submit to you. The company's business is thoroughly sound All movable plant, etc., is well written down in the books, and in addition to this we have a reserve fund to which this year we have been able to add £1,500, bringing it up to £8,000. One of the company's principal assets is our freehold land, which includes about 45 acres of surplus land for future developments. I consider this a very valuable asset, as this land is alongside the Thames, with a frontage on deep water, and behind it is the London, Tilbury and Southend Railway, which gives the ideal position for commercial land—namely, deep river on one side and a railway, with sidings into it, on the other. Our share capital at the present time is 76,400 ordinary shares and 20,000 preference shares, and we have unissued 23,600 ordinary shares. In view of the possibility of further developments at no distant date,



A Glimpse of Some of the Storage Tanks.

the board are considering the question of issuing the remainder of the ordinary shares. I now have very much pleasure in formally moving: "That the report and accounts for the year ended December 31, 1906, now presented, be adopted." Later on I shall have much pleasure in calling upon our managing director to make a short statement about the technical points of the business, and in the meantime I shall be pleased to answer any questions that any shareholder may have to ask.

Mr. Simmonds seconded the adoption of the report.

Replying to Mr. G. Mordaunt, the Chairman said that the question of the redemption of the debentures was a matter which was receiving the attention of the board. The whole of the debentures would fall due on June 30, 1908, and the matter would be dealt with before next year. In view of the fact that the debentures fell due next year, the board considered that it was in the interests of the company to make temporary arrangements for the capital required on short loan. This matter would be dealt with at the same time as the debenture question.

The motion was carried unanimously.

The Chairman next moved the payment of the dividend on the ordinary share capital at the rate of 8 per cent. per annum, and this was seconded by Mr. Allan McCall and agreed to.

Mr. McCall proposed the re-election of Mr. Owen Philipps, the retiring director, which was seconded by Mr. Alfred C. Adams and carried unanimously.

Messrs. G. H. Fookes and Co. were reappointed auditors.

The Chairman then called upon the managing director of the company to make a few remarks.

Mr. Adams said he was very pleased to have the opportunity of addressing a few words to the shareholders, because the accounts which they had before them that day marked a return of the prosperity which their company for some years had enjoyed, but which was temporarily interrupted during the year 1905. It had been a matter of great gratification to the board, as it must have been for the shareholders, that the interruption during 1905 was of a temporary character and nothing more, and that the impressions of the board as to the way in which the company's business would develop, were realised with great accuracy.

They had to cater for a trade which was developing so rapidly that it was not exactly easy to follow it so as to proceed with due caution and yet be ready when the demand came along. Their chairman had spoken of the growth of the business in petrol. Of course that was developing in quite a phenomenal manner; they would see that from the imports of petroleum spirit into London during the last two years. In 1905, the amount of petroleum spirit imported into London was as near as possible 40,000 tons, and in 1905 it was 68,000 tons. That was therefore a business which called for a very large amount of watchfulness and attention and incidentally it required an equipment which was capable of handling with promptitude and great regularity a very large volume of spirit. That equipment their company had got—(applause)—and he ventured to say without any fear of challenge that the company's tanks and installations for handling such goods as petroleum spirit, oils and molasses were second to none in this country if not in the world.

In order to keep up with that rapid development they had to considerably increase their tankage last year, and they had the satisfaction of knowing that every new tank begun and completed last year was also filled last year—a fact which shewed they were none too premature. They would more readily see that when he said that in 1906 they handled 50 per cent. more tonnage than in their biggest previous year. Whether they would need any further increase of tankage in the future it was difficult to say in connection with a trade that was extending so rapidly, but they had to work for and with their customers, and, although they did not expect their profits to increase in the same ratio, having to handle a much larger volume of tonnage at reduced rates, still the broadening of the basis of operations clearly placed the company in a better and a sounder position than ever it was before.

The company had now tankage for over 100,000 tons. He did not know whether that figure conveyed much to the shareholders, but it represented a volume of liquid which would be capable of floating the two largest ships in the world—the "Mauritania" and "Lusitania." The company had pipe lines representing a distance of seven miles on its premises, and that presented a degree of elasticity such as no other public tank installation could shew. The tonnage of shipping at the wharves had increased from 50,000 in 1899 to over 250,000 tons in 1906, and it was to cope with increasing figures such as those that it was considered necessary to construct a further deep water pier.

Their property at Thames Haven with its river frontage was of undoubted value in that it was the only position within the Port of London which would be capable of accommodating such vessels as the "Dreadnought," and the two he had already mentioned, simultaneously. He thought those figures wou'd give the shareholders a very good idea of the property and business of the company in which they had their money invested, and would also possibly be of use when they had to make an appeal in connection with the extensions which the exigencies of the trade called upon them to make.

A vote of thanks to the Chairman for presiding closed the meeting.

◆

THE TIN PLATE MARKET.

Messrs. Norton, Owen & Co., of 4, Bishopsgate Street Within, London, E.C., report under date 27th March, 1907, as follows:—

In spite of the collapse in the metal market in consequence of the American panic, tin plates are remarkably firm. A meeting of the associated tin plate manufacturers was held at Swansea yesterday, and it was decided that the minimum selling prices already fixed be rigidly adhered to, consequently quotations remain unchanged as below.

The leading works are fully employed, and in some cases are unable to keep up with the demand for prompt delivery, and large quantities of plates have been sold for April at full Association prices. There is, however, a very natural reluctance on the part of buyers to place orders for forward delivery in the present unsettled condition of financial affairs.

IC	18¾ × 14	124 sheets	110 lbs.	15/3 to 15/4½ per box.
IC	19¼ × 14	120 ,,	110 ,,	15/3 ,, 15/4½ ,,
IC	20 × 10	225 ,,	156 ,,	21/4 ,, 21/6 ,,

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FEBRUARY PRODUCTION IN THE TEXAS AND LOUISIANA DISTRICTS.

Although the consumption of oil in the Gulf petroleum producing districts still continues to be in excess of the supply, there was a decided gain in the production during February, the daily shortage for that month being much below that of the first month of the year. The stocks which have been constantly drawn upon are rapidly diminishing, and if the yield from the producing districts is not further augmented, the stocks will in all probability be exhausted before the end of the present year. Work is, however, being pushed forward as quickly as possible in connection with the trunk pipe lines from the Mid-Continent fields, and so in the not far distant future, a new source of oil will be open for the various refining firms in Texas.

The *Oil Investors' Journal* gives the following as the production of the various districts during February as compared with the yield during January:—

District.	January. Barrels.	February. Barrels.
Batson Prairie	210,000	200,000
Humble	195,000	205,000
Saratago	190,000	235,000
Sour Lake	170,000	180,000
Spindle Top	125,000	110,000
Dayton	12,800	6,400
Jennings, La.	400,000	365,000
Caddo	2,500	2,500
Welsh	3,500	3,000
Total	1,380,800	1,306,900
Daily average	42,219	46,675

When it is remembered that February had three days less than January, it will be seen that the daily average increase in the total production from all the fields was about 4,400 barrels.

◆

DEVELOPMENTS NEAR ATCHAFALAYA BAY.

Mr. I. N. Knapp, formerly of Chanute, Kansas, has recently secured 640,000 acres in one lease, between Bayou la Fourche and Atchafalaya Bay, in Terrebonne and La Fourche parishes, where there are numerous gas escapements and sulphur incustations. His first test has been at Houma, in the south-east quarter of township 20 south, range 19 east, Terrebonne parish, but this was abandoned at a depth of 2,471 feet on account of a twist-off in the four-inch. There were no indications of oil or gas found, other than on the surface, and the ground was "tight," with no oil sands or other porous rock material. Below 1,600 feet several strata of limestone were encountered and also beds of lignite and shell conglomerates. The fossil shells found indicate, it is said, that below 2,200 feet Miocene formations were reached. Arrangements are being made by Knapp to put down another hole on the west end of his lease near the Atchafalaya Bay. The Louisiana producer is keenly alive to the necessity of new territory if the present petroleum yield is to be maintained.

◆

PRODUCTION OF ENGLISH COMPANIES IN RUSSIA.

Baku Russian Petroleum Co., Ltd.—The production for the week ended 16th March was 255,000 poods, or 4,111 tons; and for the week ended March 23rd was 275,000 poods, or 4,433 tons.

Russian Petroleum and Liquid Fuel Co., Ltd.—The production for the week ended March 16th was 188,000 poods, or 3,031 tons; and for the week ended 23rd March, 123,000 poods, or 1,983 tons.

Spies Petroleum Co., Ltd.—The output for the week ended 17th March was 118,625 poods, or 1,913 tons; and for the week ended 24th March, 79,805 poods, or 1,287 tons. The falling off in the output was due to a strike, which ended on the 23rd inst.

The European Petroleum Co., Ltd.—The production for the week ended 17th March was 130,664 poods, or 2,107 tons; and for the week ended 24th March was 135,598 poods, or 2,186 tons.

◆

Total Gulf Coast Production.—An increase was brought about in the total production of the Gulf Coast fields during February, this increase being approximately 7,000 barrels. At the end of February the total production was about 51,000 barrels.

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THE ANGLO-RUSSIAN PETROLEUM COMPANY, LIMITED.

DIRECTORS' REPORT.

The report of the Anglo-Russian Petroleum Co., Ltd., which has just been issued states that the attention of the board during the year under review has been largely directed to reducing the expenses of the company. In this they have been so far successful that the total expenses have been reduced from an average of £429 per month during the first five months of the year, to an average of £242 from April to October. In the meantime the liabilities have been reduced from £3,182 on April 4th, 1906, to £1,099 on October 31st, 1906. Of the latter £612 is undrawn directors' fees. Since October 31st the average monthly expenditure to the end of February has been £162. In view of the necessity of husbanding the resources to the utmost, work on the geological survey has been greatly reduced, and will shortly be discontinued. It has resulted in much useful information, and the board recognise the desirability of continuing it as soon as an increase in the resources shall render it possible. With a view to settle, if possible, the disputes over the boundary which have been going on for many years, a survey has been made by Mr. Brangan, a Russian Government surveyor. The company are also, by Russian law, compelled to have a plan prepared by Government engineers filed in the Government Office. During the year the company has recovered possession of a large piece of land that was in dispute near No. 8 well, and the board believe that the dispute with the Russian Government over south boundary of the north block will soon be settled in the company's favour, but a small block of 12 dessatines at the sulphur springs has been lost to the company. No. 1 well has been producing steadily as usual, and a stock of 1,877 poods of oil was on hand on February 18th. As soon as the condition of the roads sufficiently improves, this will be sold. The London expenses this year have amounted to £1,316. This includes several extraordinary items, such as £60 for publishing the report of the last general meeting and £74 interest and bank charges, which are not likely to occur again. Last year the amount of the London expenses was £2,185. The directors, although credited this year with £1,000, have only actually drawn £387. They have undertaken not to draw any fees until such time that the company is on a more satisfactory basis.

LATEST FROM GROSNY OIL FIELDS.

The following are a few details recorded in connection with the latest developments at the Grosny oil fields.

A second borehole has been started by the executors of Maximoff on plot No. 15, they have also resumed deepening of the borehole on plot No. 26 of the Grosny Oil Co., which was long inactive. They are also starting a second well on the same plot. On the Yermoloff plot of the Akhverdoff Co., in well No. 77, from a depth of 1,449 feet, dry gas appeared and the water broke through the casing. The water also appeared in the neighbouring well No. 38, renowned for its spouter. On the Voiskovoi plot of the same firm, in well No. 35, after it had been spouting oil, water appeared.

After the abolition of the Technical Committee for the preservation of the oil fields, there is nobody to watch and prevent such occurrences. On plot No. 40 of the Spies Petroleum Co., the seventh derrick is now in course of erection, the oil stratum has been reached in well No. 2, whilst well No. 1, after being deepened has recommenced spouting intermittently.

On plot No. 38 of the Akhverdoff Co. the deepening was resumed of a well which was for a long time inactive, and the laying down of a second well has been commenced.

The St. Petersburg Co. will soon start drilling their well No. 12. The Tcheleken-Daghestan Co. are erecting two derricks. The Caspian and Black Sea Society are erecting a derrick on each side of their two plots. The Russian Standard has an intermittent spouter on plot No. 36, from a depth of 1,799 feet. The well has been capped for want of storage facilities. There are rumours of an impending strike of workmen.

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The Petroleum Export Trade of Batoum during 1906.

The troubled condition of Russia in general, and the special troubles which have afflicted the Baku petroleum industry, have done a very great amount of damage to the Russian petroleum export trade, which has lost its predominant position not only in Europe, but also in the Far East, Northern Africa, and the Near East.

A comparison of the whole petroleum exports in 1906 with those of former years shews that the decrease last year was: against 1901, by 43·3 million poods; against 1902, by 50·4 million poods; 1903, by 47·5 million poods; 1904, by 47 million poods; and against the unsuccessful year of 1905, by 7·3 million poods. This systematic decline in exports is due to the local disorders which have deprived the Russian oil market of all stability.

During 1906 most of French markets and also some of those of other countries were lost to the Russian petroleum trade. It is sufficient to point to the fact that during the whole of the year only one cargo of distillate, 325,000 poods, was shipped to France, whilst the total shipments to France did not exceed 2,545,000 poods, against 4,532,000 poods in 1905, and 11,673,000 poods in 1904. In 1906, the trade with France was kept up mainly by lubricating oils.

The Anglo-American Co., the "Shell" Co., formerly the principal buyers on the market, and several others during the past year did no business at all in the Russian export trade, whilst in former years these firms used to take considerable quantities of kerosene and solar oil. It is clear that these firms have satisfied their needs with Roumanian, Galician and even American oil. The causes which made them abandon the Russian trade are the want of assurances in prompt delivery of goods under contract, owing to the strikes and frequent stoppages of traffic on the railway. For the same reasons, some smaller buyers have also stopped dealing with Russia.

The opening of the Mantascheff case oil works in the latter half of the year somewhat revived the kerosene trade by increasing the operations of the case oil industry, which to the town of Batoum is the most important factor of all. In normal times the turnover of the case oil trade is about 25 per cent. of the total oil trade of Batoum or 35 per cent. of the kerosene export trade.

Among other products, solar oil was only in small demand, the total exports of this product having amounted to only 12 to 15 per cent. of the average normal yearly figure. Here we see the effect of the abstention of the Anglo-American Co., which in 1903 and 1904 was the largest buyer of this product. The demand for solar oil from the other firms is comparatively small.

The following are the comparative figures of the exports of various products during the last three years:

	1904.	1905.	1906.
Kerosene (refined) ..	53,269,000	28,180,000	22,444,000
Kerosene Distillate..	8,260,000	2,080,000	325,000
Solar Oil	5,516,000	1,573,000	696,000
Machine Oil	8,111,000	5,514,000	6,226,000
Spindle Oil	1,255,000	561,000	648,000
Cylinder Oil	150,000	162,000	111,000
Vaseline Oil	526,000	304,000	404,000
Lubricating Oil Dis.	1,006,000	726,000	140,000
Residuals..	1,207,000	332,000	1,102,000
Total	79,300,000	39,432,000	32,105,000

The above table clearly shews the great decline in kerosene, which is the principal article of the Batoum export trade. The decline in the kerosene trade is seen, first of all, in the falling off in shipments to the United Kingdom, which shew a decline in 1906 against 1904 by about 12,000,000 poods, or 60 per cent. This shortage falls chiefly on kerosene and partly on solar oil. The exports to France shew a decline by about 9,000,000 poods, which brought the trade down to about one-fifth of the normal figure. Here the shortage is mainly due to distillate, which declined by 8,000,000 poods, and partly to lubricating oils. The decline has also affected the exports to other countries, to a larger extent Belgium, Holland and Austria, and to a smaller extent Spain, Italy, etc. Only one cargo of 300,000 poods was shipped to the Far East for the whole year, while formerly Batoum did a very brisk trade in kerosene with the Far Eastern markets, to which there were exported in 1904, 16,831,000 poods; and in 1904, 20,693,000 poods. The Russian petroleum export has also lost much of the trade with the foreign Black Sea ports, where for a time, owing to the stoppage of the Russian case oil supplies, the trade was monopolised by the products of other countries. Only to the Russian home ports the shipments of kerosene in bulk continued regularly and undiminished.

CLASSIFIED IMPORTS INTO UNITED KINGDOM UP TO MARCH 23rd, 1907

IN GALLONS.

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Country.	Illuminating.		Lubricating.		Residuals.		Gas Oil. (Solar)		Benzine.		Fuel Oil.		Other Descriptions.		Totals.	
	Since Mar. 11.	From Jan. 1.	Since Mar. 11.	From Jan. 1.	Since Mar. 11.	From Jan 1.	Since Mar. 11.	From Jan 1.	Since Mar. 11.	From Jan. 1.	Since Mar. 11.	From Jan. 1.	Since Mar. 11.	From Jan. 1.	Since Mar. 11.	From Jan. 1.
Austria ...	—	—	24,000	61,640	—	40,000	—	—	—	—	—	—	—	—	24,000	101,640
Belgium ...	—	153,410	15,500	132,420	—	—	—	—	—	—	—	—	—	590	15,500	286,420
Canada ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dutch India.	—	—	—	—	—	—	—	—	—	4,540,830	—	—	—	—	—	4,540,830
Germany ...	17,160	1,085,090	22,940	366,130	—	2,000	—	—	—	—	—	—	—	2,200	40,100	1,455,420
Holland ...	—	480	2,000	3,440	—	—	—	—	—	123,680	—	—	3,820	38,800	5,820	166,400
Roumania ...	—	1,102,830	—	—	—	—	—	1,065,900	—	591,450	—	126,700	—	—	—	2,886,880
Russia ...	1,377,000	5,614,880	327,500	1,491,400	—	—	—	—	—	600	—	—	—	—	1,704,500	7,106,880
U.S.A. ...	4,397,450	23,487,780	1,085,450	9,133,130	400,670	422,010	1,443,200	12,917,460	—	426,110	1,332,000	1,332,000	52,560	459,840	8,711,330	48,178,330
Other Countries	260	260	8,800	15,410	—	—	—	—	—	2,500	—	40	—	240	9,060	18,450
	5,791,870	31,444,730	1,486,190	11,203,570	400,670	464,010	1,443,200	13,983,360	—	5,685,170	1,332,000	1,458,740	56,380	501,670	10,510,310	64,741,250

The following are the figures of the exports of petroleum products to different countries during the last three years :—

	1904.	1905.	1906.
Russian Ports	3,852,000	2,730,000	4,106,000
England	20,504,000	12,022,000	8,750,000
France	11,763,000	4,532,000	2,545.00
Germany	2,704,000	2,815,000	3,063,000
Belgium and Holland	7,680,000	3,738,000	4,451,000
Italy	1,603,000	1,040,000	692,000
Other European Countries	2,075,000	1,650,000	445,000
Turkey, Balkan States and Egypt	12,288,000	6,377,000	7,753,000
Far East	16,831,000	4,528,000	300,000
Total	79,300,000	39,432,000	32,105,000

The various petroleum exporters have each lost part of their trade, the extent of which, however, varied. Thus, the Caspian and Black Sea Society in 1906 shipped not more than 28 to 30 per cent. of their normal yearly export. The exports of Nobel Bros. represented 40 per cent. of their normal figure, and an equal proportion was shipped by Mantascheff and Co. In the case of the Caspian and Black Sea Society and Mantascheff, the decline was chiefly in case oil shipments. In this respect Messrs. Siderides came out best, their shipments in 1906 having amounted to 75 per cent. of their normal figures.

The total exports during the year were divided among the various exporting firms as under :—

	Poods.
Caspian and Black Sea Society	5,266,000
Nobel Bros.	9,000,000
Mantascheff and Co.	6,360,000
Siderides	3,230,000
Caspian Society	2,453,000
Oleum	1,745,000
Schibaieff and Co.	1,260,000
Other Firms	2,791,000
Total	32,105,000

In view of the reduced turnover of each firm, the expenses per pood of kerosene shipped have increased.

The deliveries of oil from Baku were also comparatively small, although they were larger than in 1905. In the small deliveries we see the effects of the labour and political troubles at Baku and Batoum as well as on the Transcaucasian railway. The pipe line worked in an irregular manner throughout the year, having received no more than 17,533,000 poods of oil and delivered at Batoum 18,297,000 poods. The arrivals of kerosene in through tank waggons, which in 1905 were only 1,000,000 poods, in 1905 went up to 4,236,000 poods. This is due to the preference shown by exporters to this mode of transport since the pipe began to retain 2 per cent. for leakage. In the deliveries of lubricating oils, there was no great falling off, the difference against 1904 being only 1,400,000 poods.

The arrivals of petroleum products at Batoum from Baku during the last three years were as under :—

	1904.	1905.	1906.
Refined Kerosene ..	64,600,000	18,513,000	22,533,000
Kerosene Distillate .	830,000	—	—
Solar Oil	5,498,000	1,993,000	1,376,000
Machine Oil	6,871,000	5,011,000	6,814.000
Spindle Oil	1,369,000	461,000	823,000
Cylinder Oil	120,000	138,000	145,000
Lubricating Oil Dis.	958,000	247,000	146,000
Residuals	2,404,000	910,000	1,433,000
Crude Oil	135,000	23,000	—
Total	82,785,000	27,296,000	33,270,000

THE PETROLEUM AFFAIRS OF THE DISCONTO COMPANY.

The annual report of the Disconto Co. of Berlin, just published, contains the following reference to the petroleum concerns controlled by it.

The Roumanian petroleum enterprises controlled by them jointly with Messrs. S. Bleichroeder and centralised in the firm of the Allgemeine Petroleum Industrie A.G , with a capital of 17,000,000 marks, have during the past year developed in a satisfactory manner.

The Bustenari Co. was able to distribute a dividend of 20 per cent. to the preference shareholders. The preferential rights of these shares have now been extinguished, so that the company has now ordinary shares only. The ordinary shares have received 8 per cent. against 5 per cent. in the preceding year.

The Vega Co., the works of which are nearly ready, has, in accordance with the programme laid down, distributed interest at the rate of 5 per cent. on the capital engaged in the construction, as provided in the articles of association,

The Credit Petrolifer has distributed for its first financial year ended the 1/14th April, 1906, a dividend of 8 per cent. In the current financial year the sphere of operations of the company has been enlarged to a great extent, so that it was necessary to increase its capital from 3,000,000 to 5,000,000 francs.

As to the Telega Oil Co., the production of which, under an agreement, is sold to the Vega Co., the Allgemeine Petroleum Industrie A.G. has come to an understanding with Italo-Roumanian Petroleum Co., who have bought out the English interests in the Telega Co., which will leave the management of this enterprise in the hands of the Credit Petrolifer. .

The Allgemeine Petroleum Industrie A.G. will distribute a dividend of 5 per cent. on the whole share capital.

IMPORTANT AMALGAMATION IN ROUMANIA.

From Roumania comes the news of an agreement, which has been arrived at between the Disconto-Bleichroeder group and the Italian group interested in the Italo-Romana Co. and the Sylva Co., to amalgamate the Bustenari Co. with the Sylva Co. (late Telega Co.) and to incorporate the same in a new company to be called the Concordia Co.

The capital of the Bustenari Co. is 10,000,000 francs, that of the Sylva Co. 10,500,000 francs, and together 20,500,000 francs. The new Concordia Co. will have a capital of 25,000,000 francs, so that apart from the shares required to take over the properties the company will also have placed at its disposal a fresh amount of working capital to enable it to develop the properties on a larger scale. From the 14th of April next the control of the business of the Bustenari and Sylva Companies will pass into the hands of the Concordia Co.

The management of the business of the new company will remain in the hands of the Disconto-Bleichroeder group, represented by the Allgemeine Petroleum Industrie A.G. of Berlin.

THE PETROLEUM REFINING INDUSTRY OF THE UNITED STATES.

SUBSTANTIAL EXPANSION.

An article published some time ago in the Review upon the American petroleum refining industry aroused such interest among our readers that we now deem it advisable to publish some further details relative to this important and very interesting branch of the American petroleum industry. The details which we published a few months ago—in our issue of November 24th—simply gave the quantities and values of the various chemicals used in the refining of petroleum in the United States for 1905, together with other items of general information, which we published in tabular form.

It should here be mentioned that the figures relating to the American refining industry have been collected by Dr. Charles E. Munroe, professor of chemistry of George Washington University. The details previously published in the Review may be summarised in the following table:—

	1905.	1900.
Establishments	98	67
Capital	$136,280,541	$95,327,892
Salaried officials	1,974	1.201
Salaries	$2,724,065	$1,811,400
Wage earners	16,700	12,199
Wages	$9,989,367	$6,717,087
Miscellaneous expenses ..	5,297,508	3,330,851
Cost of materials	$139,387,213	$102,859,341
Value of products	$175,005,320	$123,929,384

From the above, it will be seen that the refineries in the United States directly engaged in treating petroleum are 98, but this should be 104, inasmuch in some districts two or more refineries are operated by one corporation, and in the table these have been counted as one establishment. Of the 104 refineries, 43 are situated in Pennsylvania, 19 in California, 12 in Ohio, and the remainder scattered in the other States interested in petroleum production and refining. The most rapid growth in refineries has taken place during the past few years in California, where in 1900 there were only four refineries, and ten years prior to that only two, while in 1880, when there were 33 refineries in Pennsylvania, there were none in California.

The total cost of crude petroleum, and also the quantity used at the refineries during the years in which the quinquennial census has been taken, has increased steadily, though not in the same proportion for each. The increase in cost for the year 1890, against that of 1880, was $28,000,000; for 1900 over 1890 it was $35,000,000; and for 1905 against 1900 it was $27,000,000. The increase in quantity for 1890 against 1880 was 13,000,000 barrels; for 1900 against 1890 it was 21,000,000 barrels; and for 1905 against 1900 it was 15,000,000 barrels.

One point which should be made clear is with reference to the measurement of crude and refined petroleum, and upon this we have received a number of enquiries since the publication of the details in the Review of last November 24th. While in commerce, crude petroleum is measured by barrels of 42 United States (Winchester) gallons, refined petroleum is measured by barrels of 50 United States gallons, and 50 States gallons approximately equals 42 Imperial gallons.

The following tables shew the details of the refining industry as to the kind, quantity and value of products and average price per barrel during the years 1905 and 1900:—

Product.	Number of barrels.	Value.	Average per barrel.
	1905.		
Burning Oils	34,344,522	$100,571,825	$2·93
Residuum	3,187,921	3,138,361	0·98
Paraffin Oils	1,644,400	6,210,279	3·78
Paraffin Wax	794,068	10,007,274	12·60
Reduced Oils	4.352,248	16,794,789	3·86
Naphtha and Gasolene	5,811,289	21,314,837	3·67
Neutral Filtered Oils.	504,042	1,942,153	3·85
All Other Products ..	—	15,025,802	—
	1900.		
Burning Oils	31,266,513	82,244,961	2·63
Residuum	595,615	688,455	1·15
Paraffin Oils	1,606,783	3,987,037	2·48
Paraffin Wax	774,924	7,791,149	10·05
Reduced Oils	1,766,090	7,108,168	4·08
Naphtha and Gasolene	5,615,554	15,991,742	2·85
Neutral Filtered Oils.	608,185	2,256,626	3·71
All Other Products ..	—	3,861,246	—

The number of products obtained from petroleum in the process of refining is very large; in fact, so large that it is almost impossible to obtain returns in detail for all of them. Consequently a somewhat arbitrary but well recognised classification has been adopted. For instance, all the various grades of illuminating oil and fuel are combined under the heading of burning oils. The following figures shew the percentage of the various products received from the crude petroleum refined during the years 1900 and 1905, the years when the census was taken:—

	1905.		1900.
Burning Oils	61·0	....	71·6
Residuum..	5·7	....	1·4
Paraffin Oils	2·9	....	3·7
Paraffin Wax	1·4	....	1·8
Reduced Oils	7·7	....	4·0
Naphtha and Gasolene	10·3	....	12·9
Neutral Filtered Oils	0·9	....	1·4

The report then goes on to refer in detail to the distillation of crude petroleum, which, the author remarks, is usually carried out in either cylindrical or "cheese box" stills. The size and arrangement of these stills and the method of heating them vary with the character of oil to be treated and the products sought. The cylindrical still consists of a cylinder of boiler plate, 30 to 40 feet in length and 12 feet 6 inches to 14 feet in diameter, the lower half of which is usually of steel. The still is set horizontally in a furnace of brickwork, which is usually so constructed that the upper surface of the still is exposed to the air. Stills are often set in batteries of from two to ten for convenience in operation. The "cheese box" still has a body and a dome-shaped top made of boiler-plate, and a double-curved bottom made of steel plate. They may be of 30 feet in diameter and 9 feet in height, and they are set vertically on a series of brick arches. The working charge of the cylindrical still is from 600 to 1,000 barrels, and of the cheese box still 1,200 barrels.

Either form of still may be heated by direct fires or by coils of steam pipes, either closed or perforated, which may be fitted into the stills to heat the oil, or by the injection of steam to facilitate, on the principle of partial pressures, the passing over of the distillates. Some stills are connected with an exhaust pump by which a vacuum may be maintained in them during distillation. The top of the still is usually provided with a dome, into which the vapours rise and from which they pass to the condensers. The condensing apparatus consists primarily of long coils of pipe immersed in tanks through which cooling water flows. All the coils or lines are made to converge near the terminal so that they enter the receiving house within a few inches of each other. A trap is placed in the pipe near the end of each line for the purpose of leading off the gases or difficult condensable vapours which are produced, and these are either collected for fuel or discharged into the atmosphere. The condensing pipes generally deliver the distillates into box-like receptacles,, sometimes known as "sight boxes" because they have sides of plate glass through which the running of the distillate may be observed. Hydrometers by which the density of the distillate may be noted, and theomometers, for determining its temperatures, are immersed in the flowing liquid or in samples of the run which may be taken from time to time for testing. As the character of the distillate changes, the delivery pipes from the condensers are turned to different receptacles. The receptacles lead to storage tanks or reservoirs, sometimes styled "cut tanks."

In addition to the above stills there are in use what are known as tar stills, which are made of iron or steel and are cylinders 10 feet in diameter and 20 feet in length. They are set horizontally in brickwork in batteries of two, and are heated by fire. They hold about 260 barrels, and are provided above with air condensers leading from a dome in the centre of the top of each cylinder. The condensers are of four inch iron pipe coiled in three turns, one above the other in a rectangle of about the length and width of the still. As the coil makes one complete turn, it is trapped to carry off the products which have condensed at that stage.

As stated, the process of distillation varies with the circumstances, but the operation may take place as follows: The oil is first allowed to stand in large tanks so that part of the water and sediment are removed before it is pumped to stills into which live steam is introduced. Distillation commences at once, and the distillate is collected in a receptacle continuously until its specific gravity reaches 0·74 (60° B.). The condensers are now connected to another receptacle, and as the temperature rises and distillation proceeds the distillate is collected until its specific gravity reaches 0·81 (40° B.). The heavy oil which remains is often distilled with superheated steam for the production of lubricating oil. The first original distillate is redistilled by steam and separated, commonly, into five different fractions. The second original fraction may be subjected to a second distillation to drive off lighter oils, which are then added to the first original fraction. The third original fraction may be chilled so as to cause the paraffin present to crystallise. The semi-solid mass of paraffin thus produced is then subjected to pressure to drive out the oil which is present. This oil is further subjected to the action of steam in a still to remove from it certain oils which possess a pungent and offensive odour. The distillates are then subjected to chemical treatment or to filtration, or to both if further refining be desired.

It was noted long ago in the making of coal gas that if the less volatile products from the distillation of the coal were allowed to condense and fall back into the hot retort, the liquid was decomposed into other substances, some of which were much more volatile than the original condensation product. This process of breaking up an organic liquid by heat is called "cracking." It is a process of destructive distillation, and may be applied to many substances. It has long been applied to the treatment of petroleum, for by its use a larger portion of illuminants and oils of lowing boiling point may be obtained from a crude petroleum than is usually obtained by simple distillation, since only in the latter case a large per cent. of the petroleum may remain as heavy oils or paraffins. In this process the operation of distillation is carried out as before, using fire, but when the second original fraction has been separated and collected the fires are slackened, and the distillation allowed to proceed slowly, in consequence of which the vapours of the heavy oil are repeatedly condensed upon the dome of the still and fall back upon the hot oil beneath, with the result that there is produced a large volume of gas, composed chiefly of marsh gas and hydrogen; a distillate of suitable specific gravity for the production of illuminating oil; and a heavy, tarry residue, called "residuum," which remains in the still. This residuum goes to the tar still, where on further distillation by fire there is collected at the first trap heavy distillate, at the second trap intermediate distillate, and at the third trap light distillate, while tar coke is left in the still. The first of the above distillates is wax bearing, and in the last part of its run this distillate is known as wax tailings; the third consists largely of illuminants, while the second distillate is of an intermediate character. All are joined to analagous materials passing through the refinery, and are reworked by methods similar to those described above.

Oils that have to be subjected to chemical treatment to improve their colour, or to remove components which might interfere with their use for particular purposes, are pumped from the cut tanks into the agitators. The latter are narrow upright cylinders with conical bottoms, generally lined with sheet lead and provided with an air blast descending from above and with outlets below for the spent chemicals and the treated oils. Agitators may hold 50,000 gallons of oil at one charge. The reagents usually employed are concentrated sulphuric acid and caustic soda or other alkalies. The sulphuric acid forms sulphonic acids, and addition and other compounds with the unsaturated hydrocarbons, through which they become soluable in water, and may be removed. At the same time other of the components of the oil are oxidised, so that, as a result of the reaction, when the oil is mixed with acid by means of the air blast, the mixture becomes thick and black and there is an evolution of sulphur dioxide. The mass is allowed to stand and thereby separates into layers of oil and spent or "sludge" acid.

(To be concluded.)

The American Oil Market.

New York, Week ended March 9th.

A further heavy decline in the aggregate drilling of wells and new production in Pennsylvania for the month of February was reported. The total production in the Pennsylvania, Lima, Tennessee, Kentucky, Illinois and Mid-Continent fields, amounted to 35,002 barrels, against 30,728 barrels for January, 1907. Owing to the recent advances on crude oil, it is still believed that new production will shew steady gains. Since the opening of the month no change in the older fields was noted and completion continued light, being confined within defined limits, and further efforts to increase and extend producing limits were not realised. The old wells are holding up fairly good. Developments will be governed by future operations. The extreme cold weather does not seem to hinder operations in the Canadian oil fields, says the *Oil, Paint and Drug Reporter*, and indications point to active operations. Conditions governing the Mid-Continent oil fields remained unchanged.

Advices from Texas continue favourable as to the progress of work by pipe lines. Reports from Beaumont, Texas, note that good progress is being made on the line, but that it will be nine months before it is in operation. When the lines are in operation it is estimated that in the aggregate 40,000 barrels of oil will be brought into Texas daily, and will be equal to the discovery of another coastal field as far as the quantity is concerned. The territory oil is lighter than the Texas oil, and contains more of the illuminating qualities and will be used for refinery purposes exclusively. Advices from Waco, Texas, note that contracts have been let to Corsicana parties for the drilling of seven wells in the South Bosque oil field. The wells which are brought in all have a yield of a few barrels per day of fine oil, and not a dry hole has yet been put down. It is hoped to hit the main pool with some of the new wells, though the field is already paying very well. Information from Saratoga, Texas, was to the effect that a flowing oil well was brought in, which is good for a production of 700 barrels per day. The following prices are for Texas and Louisinana crude oils, as credit balances as posted by pipe lines, and are according to gravity:—Spindle Top, 78 to 83c.; Sour Lake, 76 to 81c.; Batson, 72 to 81c.; Saratoga, 76 to 79c.; Humble, 74 to 83c.; Dayton, 76 to 79c.; Jennings, 66 to 69c.; Shreveport, 66 to 69c.

REFINED AND PRODUCTS.—The demand for refined for export has been seasonable, and trade in the local market continued satisfactory. The Russian position remained unchanged and the strike continues, but is confined to Armenian firms. No charters of steamers to load case oil to the Far East have been made.

The price for barrelled oil for export remained firm, and the market is quoted at 7·75c. for New York loading, and 7·70c. for Philadelphia loading. The total engagements during the week in the local market amounted to over 162,000 barrels. The principal foreign markets remained unchanged. Freight rates are firm at 2s. 2d. @ 3s. od. hence to London, and 2s. 3d. @ 3s. od. to Continental ports, as to port and vessel.

Cases for export were in moderate demand, and sales of about 75,000 cases were reported. The price of plain tops closed firm at 10·25c. Freight rates closed firm and unchanged.

Crude for export were in light demand with sales 195,000 reported. Pennsylvania crude closed at 7·60c. in barrels. Cases for export closed quiet, and no sales have been reported.

Naphthas rested on a firm basis. For export, no sales have been reported.

CLOSING QUOTATIONS.

Crude.		Week ended Mar. 2. 1907.	Week ended Mar. 9. 1907.
National Tran. Certificates	per bbl.	$1·63@1·64	$1·63@1·64
Pennsylvania crude in bbls.	per gal.	7·65	7·65
Pennsylvania crude in bulk	.. ..	4·55	4·55
Residuum, bbls. for export	.. ..	6@6½	6@6½

CRUDE AT THE WELLS.

The quotations for oil represented by credit balances were ;—

	Week ended Mar. 9. 1906.	Week ended Mar. 9. 1907.
Tiona	1·68	1·73
Pennsylvania	1·58	1·63
North Lima	0·94	0·92
South Lima	0·89	0·87
Indiana	0·89	0·87
CANADIAN OIL:		
Petrolia	1·34	1·32

REFINED—FOR EXPORT.

		Week ended Mar. 2 1907.	Week ended Mar. 9. 1907.
Cargo Lots for export..	in barrels	7·75	9·75
	in bulk ..	4·50	6·50
Philadelphia loading ..	in barrels	7·70	9·70

REFINED IN CASES—110 FIRE TEST.

	Week ended Mar. 2.	Week ended Mar. 9.
3,000 to 10,000..	10·40	10·40
1,000 to 3,000..	10·45	10·45

REFINED—JOBBING LOTS.

In barrels, pkgs. included.

		Week ended Mar. 2.	Week ended Mar. 9.
120 fire test, S.W. ..	in barrels	12	12
130 fire test, S.W. ..	.. ..	12½	12½
150 fire test, W.W. ..	.. ..	13½	13½
In bulk from tanks	.. ..	10	10
300 fire test	.. ..	12¾@13½	12¾@13½

NAPHTHA AND GASOLENE.

	Week ended Mar 2.	Week ended Mar. 9.
Naphtha, crude, car. lots, 68 @ 72 deg.	—	—
Gasolene, 86 deg...	23·00	23·00

PENNSYLVANIAN OIL RUNS from Mar. 1st to Mar. 7th were:—Mar. 1st, 195,557; Mar. 2nd and 3rd, 167,596; Mar. 4th, 57,693; Mar. 5th, 148,522; Mar. 6th, 154,994; Mar. 7th, 161,858. For the month of January, 2,856,177.

THE DELIVERIES OF PENNSYLVANIA OIL for the same dates were:—137,087; 275,760; 154,385; 165,130; 156,639; 153,165. For the month of January, 5,359,617.

CHARTERS FOR THE WEEK.

The total charters for refined, crude, naphtha, etc., in bulk, barrels and cases, during the week ended March 8th and from Jan. 1st, were as follows:—

	Week.	Year.	1906.
Refined, barrels and bulk	382,163	2,684,941	2,152,100
Refined, cases	279,660	2,222,428	2,506,000
Crude, barrels and bulk..	24,478	466,872	365,400
Crude, cases	27,000	27,000	65,000
Naphtha, barrels	24,471	59,525	82,900
Residuum, barrels ..	—	138,928	115,000
Lubricating, barrels ..	—	—	72,900
Total, barrels cde. eq. ..	758,710	5,634,221	4,696,188

CLEARANCES FOR THE WEEK.

During the week ended Mar. 8th, and since Jan. 1 the clearances of petroleum, in gallons, from the port of New York, were as follows:—

	Week.	Year.	1906.
Refined	5,986,570	94,108,370	89,693,640
Crude	50,000	787,430	210,100
Naphtha	229,450	1,523,180	3,311,100
Residuum ..	—	71,550	—

EXPORT STATISTICS.

The total exports from the port of New York and from the United States have been:—

	Gallons.
From New York, week ended Mar. 8th ..	7,982,093
Total from New York, from Jan. 1st, 1907 ..	124,944,625
Same period last year	119,808,300
Increase	5,136,325
From United States, week ended Mar. 8th ..	23,748,008
Total from United States, since Jan. 1, 1907	225,198,694
Same period last year	215,383,454
Increase	8,815,240

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The "Review" Shipping List.

March 29, 1907.

(The following abbreviations are used in this table:—L. Left; P. Passed; Arr. Arrived; Sp. Spoken; Tr. Trading.)

Vessel.	From.	For.	Latest Date and Position.
ALICE ISABELLE	Sables d'Olonne	Philadelphia	Arr. Mar. 18
ALCHYMIST	Hamburg	Terneuse	Arr. Mar. 22
ALEMBIC	Louisburg (C.B)	New York	L. Mar. 4
AMERICAN	San Francisco	New York	Arr. Feb. 17
APPALACHEE	San Francisco	Shanghai	L. Mar. 10
APSCHERON	Antwerp	Gankema (Batoum)	L. Mar. 25
ARAL	Copenhagen	Tyne	L. New York, Mar. 2
ARAS	Tyne	Kustendje	P. Sagres, Mar. 15
ARGYLL	—	—	Coasting U.S. (Pacific)
ASTRAKHAN	Philadelphia	Dover	Off the Wight, Mar. 20
ATLAS	Seattle	San Francisco	P. Tatoosh, Mar. 6
AUGUST KORFF	Manchester	Philadelphia	Arr. Mar. 22
AUREOLE	Blyth	New York	L. Mar. 23
AZOV	—	—	Trading on W.C. of South Amca.
BAKU STANDARD	Kustendje	Blaye	P. Oitavos, Mar. 18
BALAKANI	London	Kustendje	P. Gibraltar, Mar. 18
BATOUM	Tyne	Port Arthur (Texas)	P. Dungeness, Mar. 7
BAYONNE	Tyne	New York	Arr. Mar. 20
BEACON LIGHT	Penarth	Port Arthur (Texas)	P. Barry Island, Mar. 7
BEME	Rangoon	Coconada	Arr. Mar. 4
BLOOMFIELD	Rotterdam	Blyth	Arr. Mar. 9
BORJOM	Batoum	Alexandria	Arr. Mar. 23
BRILLIANT	Tyne	Philadelphia	P. Dunnet Head, Mar. 16
BROADMAYNE	Port Arthur (Texas)	Liverpool	L. Mar. 7
BULLMOUTH	Shanghai	Balekpappan	L. Mar. 16
BULYSSES	Soesoe	—	L. Singapore, Feb, 21
BURGERMEISTER PETERSEN	Hamburg	Philadelphia	L. Tyne, Mar. 20
CADAGUA	Barry	Philadelphia	Arr. Mar. 6
CALCUTTA	San Francisco	Shanghai	L. Jan. 13
CARDIUM	Cardiff	Balekpappan	L. Singapore, Mar. 7
CATANIA	San Pedro	San Francisco	L. Feb. 13
CAUCASIAN	Batoum	Hamburg	P. Sagres, Mar. 16
CHARLOIS	Antwerp	Philadelphia	P. Beachy Head, Mar. 23
CHESAPEAKE	New York	Calcutta	Arr. about Mar. 8
CHESTER	Antwerp	Grimsby	L. Mar. 25
CIRCASIAN PRINCE	—	—	Trading on W. C. of South Amca.
CLAM	Singapore	Hong Kong	L. Mar. 14
COWRIE	Bombay	Soesoe	Arr. Mar. 18
COL. E. L. DRAKE	New York	Port Arthur (Texas)	P. Sand Key, Feb. 16
CYMBELINE	Batoum	London	P. Constan'ple, Mar. 18
CZAR NICOLAI II.	Batoum	Hamburg	Arr. Mar. 15
DAGHESTAN	Havre	Shields	Arr. Mar. 23
DELAWARE	Kustendje	India	P. Aden, Mar. 13
DEUTSCHLAND	New York	Rotterdam	Sig. Mar. 23, 25 m. S.W. of N. Fore
DIAMANT	New York	Hamburg	Arr. Mar. 19
ELAX	—	Tyne	Arr. Jan. 12
ELISE MARIE	Tyne	New York	P. Butt of Lewis, Mar. 11
ENERGIE	Rotterdam	Philadelphia	Arr. Mar. 19
ERIVAN	Antwerp	Philadelphia	L. Mar. 5
ETELKA	Batoum	Bordeaux	P. Tarifa, Mar. 14
EUPLECTELA	Manchester	Philadelphia	P. Eastham, Mar. 22
EXCELSIOR	Novorossisk	Hamburg	Arr. Mar. 13
EZIO	—	—	Coasting Peru
FRANCE MARIE	Marseilles	Philadelphia	P. Gibraltar, Mar. 13
GEESTEMUNDE	New York	Danzig	P. Dunnet Head, Feb. 25
GENESSE	London	Manchester	P. Southend, Mar. 18
GEORGIAN PRINCE	New York	Havana	L. Mar. 8
GOLDMOUTH	Rotterdam	Dover	L. Mar 20
GUT HEIL	Philadelphia	Swinemunde	L Mar. 16
HAINAUT	Antwerp	Far East	L. Mar. 18
HELIOS	Bremen	Philadelphia	Arr. Mar. 21
HOTHAM NEWTON	Batoum	Antwerp	L. Gallipoli, Mar. 17
HOUSATONIC	Tyne	Philadelphia	Arr. Mar. 17
IMPERIAL	—	—	Tr. on Lakes btn. U.S. and Can.
JOANNIS COUTZIS	Rouen	Piræus	Mar. 23
J. B. AUG. KESSLER	Rotterdam	—	P. Malta, Mar. 20
JAMES BRAND	Rouen	Tyne	Arr. Feb. 18
KURA	Philadephila	London	P. Lizard, Mar. 23
LA CAMPINE	Antwerp	Philadelphia	P. Lizard, Mar. 8
LA FLANDRE	Ghent and Portland	Philadelphia	Arr. Mar. 14
LA HESBAYE	Antwerp	New York	L. Mar. 14
LA MADELEINE	Dunkirk	Nantes	Arr. Mar. 7
LA VIGUESA	Philadelphia	Seville	Arr. Mar. 11
LACKAWANNA	Bengkalis	Port Natal	Arr. about Mar. 8
LANSING	Port Harford	San Francisco	Arr. Mar. 2
LE COQ	Havre	Rouen	L. Mar. 23
LOUTSCH	Barcelona	Novorossisk	P. Dardanelles, Jan. 10
LUCERNA	Philadelphia	London	P. Del. Break
LUCIFER	Manchester	New York	Sp. Mar. 8, 51 N., 13 W.
LUCIGEN	Tyne	Philadelphia	Arr. Mar. 17
LUCILINE	Batoum	Havre	P. Gibraltar, Mar. 19
LUMEN	Philadelphia	Venice	P. Reedy Island, Mar. 2
LUX	Rouen	Philadelphia	L. Mar. 23
MANHATTAN	Venice	Batoum	Arr. Constant'ple, Mar. 23
MANNHEIM	New York	Hamburg	Arr. Mar. 15
MARGARETHA	Kustendje	Italy	L. Constant'ple, Mar. 2
MAVERICK	San Diego	San Francisco	Arr. Feb. 20
METEOR	Genoa	Odessa	Arr. Mar. 5
MEXICAN PRINCE	Cienfuegos	Liverpool	Arr. Mar. 23
MIRA	New York	Rotterdam	L. Mar. 20
MUREX	Singapore	—	L. Mar. 17
NARRAGANSETT	London and Tyne	New York	Arr. Mar. 14
NERITE	—	—	Tr. in China Seas
NEW YORK	New York	Southampton	Sig. 265 m. W. of Lizard, Mar. 23
OCEAN	Amsterdam	Philadelphia	P. Barry Island, Mar. 23
OILFIELD	Tyne	Philadelphia	P. Nantucket, Mar. 23
ORANJE PRINCE	Tyne	Banes	Arr. Mar. 11
ORIFLAMME	Rouen	Philadelphia	Arr. Mar. 14
OSCEOLA	Axim	New Orleans	Arr. Mar. 15
OTTAWA	Philadelphia	Tampico	P. Del. Break, Mar. 1
OURAL	Manchester	Batoum	P. Eastham, Mar. 14
PALEMBANG	Soesoe	Singapore	Arr. Feb. 16
PAULA	Swinemunde	Hamburg	Arr. Mar. 16
PECTAN	Port Arthur	Thameshaven	P. Walmer, Mar. 23
PENNOIL	Rotterdam	Shields	Arr. Mar. 25
PERLAK	Padang (Pankalan)	Scesoe	L. Feb. 11
PHOEBUS	New York	Hamburg	P. Scilly, Mar. 25
PINNA	Hamburg	Tyne	Arr. Mar. 12
POTOMAC	Liverpool	Batoum	L. Mar. 19
PROMETHEUS	Rotterdam	New York	Off the Wight, Mar. 12
PRUDENTIA	Swansea	Kustendje	P. Tarifa, Mar. 13

Vessel.	From.	For.	Latest Date and Position.
QUEVILLY	Rouen	Philadelphia	P. Lizard, Feb. 23
RION	Port Talbot	Batoum	L. Mar. 22
ROCK LIGHT	Port Arthur (Texas)	Dover	P. St. Catherine's Point, Mar. 23
ROSSIJA	Bougie	Middlesbro'	Arr. Mar. 8
ROTTERDAM	Rotterdam	New York	L. Nieuwe Waterweg, Mar. 21
RUSSIAN PRINCE	New York	Havana	P. Cape Henry, Mar. 11
SALAHADJI	—	—	Tr. Sts. Settlem'ts and Java Seas
SAXOLEINE	Philadelphia	Rouen	P. Del. Break., Mar. 23
SEMINOLE	San Francisco	Kurrachee & Bombay	L. Shanghai, Feb. 21
SILVERLIP	Balekpappan	—	At Singapore, Mar. 15
SINGU	—	—	Tr. in East Indies
SNOWFLAKE	Penarth	Cuba	L. Mar. 25
SOPHIE	Savona	Genoa	Arr. Mar. 18
SPONDILUS	—	Balekpappan	L. Mar. 19
STANDARD	Philadelphia	Swinemuude	P. Dunnet Head, Mar. 21
STROMBUS	New York	Calcutta	At Port Said, Mar. 20-21
SURAM	London	Blyth	Arr. Mar. 14 for United States
SUWANEE	Kustendje	England	L. Mar. 16
SVIET	Batoum	Odessa	L. Dec. 26
TELENA	Singapore	London	P. Ushant, Mar. 25
TEREK	Manchester	Batoum	P. Peniche, Mar. 11
TIFLIS	Tyne	Batoum	Arr. Mar. 18
TIOGA	Manchester	Sunderland	Arr. Mar. 18
TONAWANDA	San Francisco	Shanghai	At Hankow, Mar. 3
TROCAS	Kobe	—	L. Yokohama, Mar. 11
TURBO	Hamburg	Novorossisk	P. Peniche, Mar. 23
TUSCARORA	San Francisco	Madras	L. Feb. 27
TWINGONE	Madras	Rangoon	L. Mar. 3
VEDRA	Philadelphia	Hamburg	L. Plymouth, Mar. 20
VILLE DE DIEPPE	—	—	In Port Havre, Mar. 11-12
VILLE DE DOUAI NowEdward Dawson)	Middlesboro	Ibrail	L. Mar. 15
VOLUTE	Nagasaki	—	L. Mar. 19
WASHINGTON	Kustendje	Bombay	At Port Said, Mar. 11-12
WEEHAWKEN	Philadelphia	Barrow	Called Mar. 23
WILLKOMMEN	Philadelphia	Rotterdam	P. Del. Break, Mar. 9
WINNEBAGO	San Francisco	Shanghai	At Yokoha, prev. Mar. 21

Latest Market Intelligence.

LONDON OIL MARKET.

Supplied by Messrs. Benjamin & Gee, 31, St. Mary Axe, E.C.

March 27th, 1907.

The importers' price for refined petroleum remains unchanged as follows:—Russian and Roumanian, 6¼d.-6⅜d.; American, 6¾d.-6⅞d.; Water White, 7¾d.-7⅞d.

LUBRICATING OILS.

There are no alterations in prices to report, the latest quotations being:—

American pale, £7 7s. 6d. to £11.
American dark cylinder, from £7 12s.
American filtered cylinder, from £11.
Shellene, £5.
No. 1 Russian, £10 7s. 6d.

TURPENTINE.

American Turpentine is slightly higher since our last report, but is very firm. For Spot, 52s. 3d.; May to June, 50s.; July to December, 46s. 6d.

LIVERPOOL OIL MARKET.

March 27th.

Refined oils are quiet, and sellers quote 6⅛d. for Russian, Galician or Roumanian; and 6⅝d. to 7⅝d. per gallon for American.

Petroleum Spirit continues at 1s. 0½d. to 1s. 3d. per gallon for American deodorised, according to quality on the spot.

LATEST AMERICAN PRICES.

New York, March 27th.

Refined, in cases, is steady at 10·50; Standard White, 8·00; Credit balances, 1·78c.

Philadelphia, March 27th.

Standard White is still quoted at 7·95.

RUSSIA.

Baku, March 23rd.

The Baku oil market is firm. Light crude oil, spot, 28 copecs per pood; residuals, in ships, delivery during navigation, 29½; kerosene, in ships, 32 copecs.

BELGIUM.

Antwerp, March 23rd.

The petroleum market is unchanged. Price of Standard White, spot, 20½ francs per 100 kilos.

FRANCE.

Paris, March 25th.

Illuminating oil is quoted in bulk, in whole tank waggons, 22 francs per hectolitre; spirit, 29·25 francs per hectolitre. Special white oil, 30 francs per hectolitre.

GERMANY.

Hamburg, March 22nd.

The kerosene market is firm. The price of American Standard White is 6·80 marks per 50 kilos, Russian, 6·55 marks.

ROUMANIA.

March 23rd.

	Francs.
Crude oil from different fields, including pipe line charges, per 100 kgs.	4·00-4·20
Refined oil, exclusive of taxes	10·00- —
Motor benzine, including taxes	16·00-18·00
Benzine, doubly refined	24·00-25·00
Residuals in tank waggons, at refinery	3·20-3·60
Paraffin	120·00-125·00
Lubricating Oils —	
Agricultural	30-32
Prime	35-37
Extra	40-42
Royal	45-46

In barrels free on rail including octro tax of 12 fcs. per 100 kilos

Prices for Export.

Refined oil in tank waggons, per 100 kgs.	8·50- —
Benzine, sp. gr. 0·710-0·715	21·00-22·00
„ sp. gr. 0·720-0·725	19·00-20·00
„ sp. gr. 0·730-0·740	13·00-14·00
„ sp. gr. 0·745-0·755	9·00-10·00

INDIA.

Bombay, March 14th.

Petroleum is steady.

Standard Oil Co., of New York.

Current rates are:—

American, "Snowflake," 150 deg.	Rs. 6	0	2
„ Chester, 125 deg.	4	8	2
„ Monkey Brand, 125 deg.	4	2	2
„ Bulk, 125 deg. (in local made tins)	3	10	0
„ „ 125 deg. (8 Imperial gallons)	3	0	0
„ "White Camelia" brand, 125 deg.	No stock.		

The Asiatic Petroleum Company, Limited.

Current rates are:—

"Swan" Brand oil, in tins, per pair	3	4	0
Sumatra "Rising Sun," bulk, per unit	3	0	0
„ „ tins, per pair	3	10	0
Silverlight cases, per case	4	8	0
Sumatra, "Anchor" per case	4	14	0

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IMPORTS of PETROLEUM into UNITED KINGDOM

Specially prepared for this Journal by the Custom House.

FOR THE WEEK ENDED MARCH 18TH, 1907—

DATE.	PORT AND IMPORTERS.	DESCRIPTION.	NO. OF GALS.	PORT WHENCE.
Mar.	LONDON—			
12	Anglo-American Oil Co.	M.Colza	20,000	Philadel.
12	,, ,,	Lub.	66,000	,,
12	Union Lighterage Co.	,,	1,130	,,
13	Fielder, Hickman and Co.	,,	1,200	Stettin
14	Page, Son and East	Lub.Gr.	960	Antwerp
14	Argo Steamship Co.	Lub.	220	Bremen
14	G. W. Sheldon and Co.	Lub.Gr.	1,260	New York
14	Fielder, Hickman and Co.	Lub.	14,400	Philadel.
14	Lubricating & Fuel Oils, Ld.	,,	2,460	,,
15	Anglo-American Oil Co. (Genesee)	Gas	534,230	,,
15	London & India Docks Co.	Lub.	1,000	Hamburg
16	Lubricating & Fuel Oils, Ld.	,,	8,200	Marseilles
16	Scott's Wharf	,,	2,000	New York
16	Fielder, Hickman and Co.	,,	12,000	,,
16	London Oil Storage Co.	Lamp	8,000	,,
18	Mordaunt Bros.	Lub.	8,250	,,
18	G. and H. Green	,,	3,330	,,
18	Produce Brokers	,,	9,600	,,
18	G. W. Sheldon and Co.	,,	1,360	,,
18	Anglo-American Oil Co.	,,	41,000	Philadel.
18	T. H. Lee	,,	240	Hamburg
18	Page, Son and East	Lub.Gr.	240	Antwerp
	LIVERPOOL—			
12	Crew, Levick and Co.	Lub.	5,810	New York
12	W. B. Dick and Co.	,,	4,230	,,
12	George B. Taylor	,,	65,760	,,
12	Liverpool Warehousing Co.	,,	320	,,
12	Liverpool Storage Co.	,,	12,000	,,
13	Geo. B. Taylor	,,	320	,,
13	Crew, Levick and Co.	,,	2,900	Philadel.
14	Geo. B. Taylor	Lub.Gr.	2,000	Rotterdam
15	Vacuum Oil Co.	Lub.	600	Copenhagen
15	,,	,,	14,760	New York
15	Anglo-American Oil Co. (Potomac)	Lamp	807,340	Philadel.
16	Meade-King, Robinson & Co.	Lub.	4,800	Baltimore
16	,, ,,	,,	8,000	Trieste
18	Pickford's	,,	750	Hamburg
18	W. Gibson and Sons	Lamp	2,050	Boston
18	Liverpool Storage Co.	Lub.	4,800	New York
18	Colby and Co.	,,	1,450	,,
18	W. B. Dick and Co.	,,	4,420	,,
18	E. H. Kellogg and Co.	,,	2,000	,,
	BRISTOL—			
12	H. R. James and Sons	,,	41,800	,,
12	,,	M.Colza	2,400	,,
12	W. Smith and Co.	Lub.	24,200	,,
12	E. Stock and Sons	,,	240	Hamburg
12	Pickford's, Ltd.	,,	240	Antwerp
12	,,	,,	300	Hamburg
15	,,	,,	1,660	,,
18	Heaton and Co.	,,	410	Antwerp
Mar.	GRIMSBY—			
12	J. Sutcliffe and Son	Lub.	390	Hamburg
	GLOUCESTER—			
25/2	Bristol Steam Nav. Co.	,,	1,280	,,
	HULL—			
12	Hull & Netherlands S.S. Co.	Tar Oil	2,220	Rotterdam
12	G. Hardy and Co.	Lub.	140	Antwerp
12	W. Gilyott and Co.	,,	9,600	New York
12	Wilsons and N.E. Railway Shipping Co.	,,	1,400	
12	,, ,,	,,	240	Hamburg
12	,, ,,	,,	2,160	,,
12	,, ,,	,,	340	Antwerp
14	,, ,,	,,	22,600	New York
15	,, ,,	,,	1,760	,,
16	,, ,,	,,	800	Antwerp
	MANCHESTER—			
12	Geo. B. Taylor	,,	97,280	Philadel.
12	Liverpool Storage Co.	,,	10,400	,,
12	Crew, Levick and Co.	,,	10,720	,,
12	,,	M.Colza	9,410	,,
12	Manchester Liners	Lub.	840	,,
12	C. H. Morton and Sons	,,	2,560	,,
12	Meade-King, Robinson & Co.	,,	29,120	,,
12	,, ,, (Oural)	,,	163,750	Batoum
12	Bramwell, Fern and Co. (Oural)	,,	163,750	,,
14	J. T. Fletcher and Co.	,,	1,450	Antwerp
14	General Petroleum Co. (Rion)	Lamp	378,000	Philadel.
14	Anglo-American Oil Co. (Lucifer)	,,	485,410	,,
14	,, ,,	Gas	226,230	,,
14	,, ,,	,,	682,740	,,
18	W. Hodgson and Co.	Lub.	2,550	New York
18	Bramwell, Fern and Co.		3,180	,,
	NEWCASTLE—			
14	Tyne-Tees Steamship Co.	,,	200	Hamburg
16	,,	,,	1,180	Antwerp
	PLYMOUTH—			
14	Anglo-American Oil Co. (Genesee)	D.Resid.	400,670	Philadel.
	SWANSEA—			
14	Richards, Turpin and Co.	Lub.	3,400	New York
	DUNDEE—			
14	D. Alexander and Sons	,,	400	Hamburg
	GLASGOW—			
18	Anchor Line	,,	34,840	New York
	GRANGEMOUTH—			
15	W. Graham-Yooll and Co.	Lamp	4,000	Hamburg
15	,, ,,	,,	2,000	,,
15	J. Currie and Co.	Lub.	2,680	,,

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QUALITY TELLS.

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Date	Port and Importers.	Descrip-tion.	No. of Galls.	Port Whence.
Mar.	Leith—			
12	G. Gibson and Co.	Lub.	5,600	Antwerp
14	,, ...	,,	2,000	,,
14	W. Graham-Yooll and Co...	Lamp	8,240	Hamburg
14	,, ...	,,	2,180	,,
14	,, ...	,,	740	,,
16	J. Currie and Co.	Lub.	120	Bremen
18	,, ...	,,	1,460	Hamburg
	Lerwick—			
16	Olna Whaling Co.	Lamp	260	Tonsberg
	Belfast—			
16	J. C. Pinkerton and Co. ..	Lub.	140	Hamburg
	Total for Week		4,533,070	

FOR THE FIVE DAYS ENDED MARCH 23RD, 1907—

Date.	Port and Importers.	Descrip-tion.	No. of Galls.	Port Whence.
Mar.	London—			
19	General Pet. Co. (Kura)	Lamp	1,088,780	Philadel.
20	Shell Transport Co. (Pectan)	Fuel	780,000	Pt. Arthur
20	Scott's Wharf	Lub.	8,000	New York
20	Fielder, Hickman and Co...	,,	25,560	,,
20	A. Brown and Co.	,,	5,600	Philadel.
21	London and India Dock Co.	,,	4,900	Hamburg
21	G. and H. Green	L.Comp.	3,330	New York
22	Anglo-American Oil Co. ..	Lub.	46,600	,,
22	Page, Son and East.. ..	,,	100	Antwerp
23	A. Brown and Co.	,,	2,000	Hamburg
23	Bowring Petroleum Co. .. (Lucerna)	Lamp	1,207,070	Philadel.
23	Lub. and Fuel Oils, Ltd. ..	Lub.	4,920	,,
23	Shell Transport Co. (Pectan)	Fuel	552,000	Pt. Arthur
	Liverpool—			
19	Geo. B. Taylor	Lub.	51,760	New York
21	Valvoline Oil Co.	,,	6,150	,,
21	Worthington and Boler ..	,,	3,200	,,
21	G. B. Taylor	,,	32,600	,,
22	Vacuum Oil Co.	,,	7,600	,,
22	Gandy Belt Manufac. Co. ..	,,	240	Antwerp
23	Ismay, Imrie and Co. ..	,,	480	New York
23	Geo. B. Taylor	,,	19,040	Philadel.
23	Worthington and Boler ..	,,	6,000	,,
	Bristol—			
19	Ferris and Co.	,,	240	Antwerp
19	Western Pet. Co. (Rion) ..	Lamp	420,000	Philadel.
20	W. Smith and Co.	Lub.	32,760	New York
20	,, ..	Lamp	800	,,
	Hull—			
19	Wilsons and N.E. Railway Shipping Co.	Lub.	1,000	Antwerp
22	,, ,,	,,	760	Hamburg
22	,, ,,	,,	600	,,
22	Hull & Neth. Steamship Co.	Tar oil	1,600	Rotterdam
	Manchester—			
19	Consolidated Petroleum Co. (Euplectela)	Lamp	1,377,000	Batoum
19	George B. Taylor	Lub.	114,360	New York
19	Liverpool Storage Co. ..	,,	9,800	,,
22	Lanc. and York. Ry. Co. ..	,,	1,600	,,
	Glasgow—			
21	Anchor Line	,,	42,200	,,
22	J. and A. Allan	,,	36,050	Philadel.
22	,, ...	M.Colza	20,750	,,
22	Burrell and Son	Lub	16,000	Trieste
	Grangemouth—			
22	J. Rankine and Sons ..	,,	560	Antwerp
	Leith—			
23	Henderson and McIntosh ..	,,	45,230	Philadel.
	Total for the Five Days ..		5,977,240	
	Total for the Period ..		10,510,310	

JOTTINGS FROM GERMANY.

The imports of petroleum into Germany during December, 1906, according to *Petroleum*, amounted to 126,176 tons.

The Erdoelwerke Nornbostel-Wietze Co. has struck a good flow of oil in its third well at Nornbostel, which is 253 metres deep. The first two wells have also been successful. A fourth well is about to be started on the same property.

The Erdoebohrgesellschaft Shephaurglück Co. has decided to acquire a tract of land near Winsen. The well started by this company at Bannetze, near Wietze, shewed traces of oil at a depth of 196 metres. The successful results achieved in an adjoining plot by the Norddeutsche Tiefbohrgesellschaft hold out great promises of success for the well of the Stephausglück Co.

A borehole for petroleum is said to have been started in the Preuzlau district.

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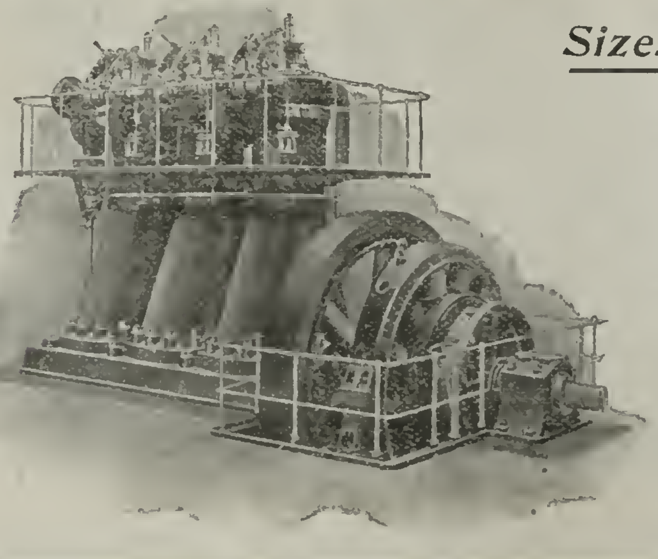

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The Petroleum Review.

By PAUL DVORKOVITZ.

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Editorial Notes.

Our Petroleum Imports.

The petroleum import trade of the United Kingdom has not been so brisk during the first three months of this year, and a deficit of over 6,000,000 gallons is recorded in the total shipments to this country. When the figures are examined in detail, however, the decrease is by no means serious. The importation of illuminating oils has increased during the first quarter of the year, an additional 2,000,000 gallons having been imported as compared with the quantities which came to our shores for the corresponding period of 1906. Benzine and residual imports shew almost a standoff against the figures for January-March last year, while gas oil, which now so largely enters into the production of gas throughout the country, has come to us in increasingly large shipments. In lubricating oil imports there has been a substantial drop of nearly 4,000,000 gallons, and in fuel shipments the deficit for the three months, as against the corresponding period of 1906, is almost 5,000,000 gallons. The imports of liquid fuel, however, during the first few months of last year were abnormal, for the recently completed storages of the Admiralty were then receiving their stocks in readiness for the sea trials with which our readers are familiar. After all, it is the illuminating oil import trade to which the greatest importance attaches, and, seeing that this is making advances upon the figures reached last year, a remark which in a milder way applies to the imports of benzine and solar oil, there is no reason for pessimism.

General Conditions in the American Fields.

The American petroleum industry has, at the present time, a very rosy outlook. The various recent advances in the prices paid to the producers have given an impetus to drilling, and, though it is yet early in the spring, much activity has already commenced in many of the fields. Illinois is expected to do great things in the matter of production, and several rumours are in the air of the establishment of refineries upon the fields. The Illinois production at the present time is approximately 50,000 barrels a day, and this figure is steadily being strengthened as transportation facilities increase. The production from Kansas and Indian Territory is about 100,000 barrels daily, considerable quantities being removed toward the Gulf of Mexico, where the demand more than consumes the production of the home fields. In California, too, there has been a general resumption of work consequent upon enhanced prices, the great new outlet afforded by the Panama pipe line having done much to improve matters. In fact from all fields come reports, which, to say the least of, are highly satisfactory.

Quietude Restored in Roumania.

It says much for the comprehensive measures adopted by the Roumanian Government, that, through the recent unrest which has prevailed in many parts of that country, no disturbances overtook the petroleum industry. Some there were who made almost desperate attempts to create an agitation, but they were promptly expelled. From many quarters came rumours of strikes, but the truth is that, though the outlook at one time was very ominous, the intervention of the troops allayed all anxiety. At Bustenari some of the workmen demanded slight increases which were promptly conceded, while at the Steaua Romana's filling shops there were fears of a strike, but this was nipped in the bud. All the important petroleum fields were completely surrounded by troups, as also were the refineries and storages installations, and so thoroughly was the work carried out that, even if any disturbances had broken out, no serious damage could have been done to property. It should be made plain that all credit is due to the Roumanian Government for the very adequate manner in which they safeguarded the industry and the foreign capital invested in it during the short period when unrest prevailed. Their action certainly augurs well for the future safety of both capital and property in Roumania's prolific territories, and should be an object-lesson to the authorities in that other great producing region where strikes and general unrest now seem to be permanent characteristics.

The Latest Converts to Liquid Fuel.

In Transatlantic shipping circles, an announcement is made of the greatest importance to those who are watching the steady progress which liquid fuel is making, especially as a power for marine craft. This statement is no other than that the Western Pacific Co., in connection with its "through to the Far East" system of railroads, is to operate as fine a fleet of vessels as any that to-day sail the Pacific, and all these liners are to be built to use liquid fuel. The vessels to be constructed are to be several in number, each of which will be equal to those moving palaces of the Hamburg-American, the Cunard and other lines which connect England with the new continent. In the past, liquid fuel has been used only in a modified degree upon passenger boats, for though the large oil tankers have for years utilised the oil in preference to carrying large supplies of coal, this is the first instance, we believe, that liquid fuel is to find a place for the propelling of ocean-going passenger craft. We trust that, as time goes on, we may be in a position to refer at length to this innovation.

American Exports during February.

The American petroleum export trade is looking up in spite of the determined attempts made in Governmental quarters to strangle it, and the details of shipments abroad for the shortest month of the year shew that, though the amount of oil exported fell below the 100,000,000 gallon mark, it was a record, being ahead of any preceding February. The American fiscal year ends with June, and so taking the exports for the first eight months, we find that they are below the figures for the similar period in 1906 by nearly 17,000,000 gallons. But the decline during the first month of this year more than accounted for this deficit for a most serious slump occurred, the decrease being considerably more than 20,000,000 gallons. It is, therefore, seen that month by month this substantial decline in America's export figures is being steadily reduced, and if the progress now being recorded in this important branch of international trade continues, it is a foregone conclusion that the total petroleum exports from America for the fiscal year, which has yet three months to run, will practically equal if not surpass those of past years.

Another Interesting U.S. Survey Report.

The most recent addition to the bulletins issued by the United States Geological Survey has just been issued, and deals with the economic geology of the Amity Quadrangle, which lies in the south-west corner of Pennsylvania, and includes a portion of eastern Washington county and small areas in northern Greene county. The main economic interest in this area lies in the facts that it has been the seat of extensive oil and gas development, and that it is almost entirely underlain by at least one valuable seam of bituminous coal. A brief abstract of the more important portions of this bulletin (which is intended for gratuitous distribution) will be found upon other pages of this issue of the REVIEW.

The Position of Galicia.

Our German contemporary *Petroleum*, which is particularly well-informed of matters concerning the Galician petroleum industry, in a recent issue, publishes a number of views concerning the present position and prospects as expressed by a person prominently connected with it. Against an output of 827,000 tons of crude oil in 1904, and 802,000 tons in 1905, the production in Galacia in 1906 was only 760,000 tons, which represents a decline against 1904 of 60,000 tons. This, however, must not be accepted as proving the decline of the Galician petroleum industry; it only means that when Tustanowice began to give as a prolific oil field, Boryslaw was neglected and all energies transferred to Tustanowice. The home consumption per annum in Austria-Hungary, amounts to 400,000 tons; for fuel purposes about 30,000 tons is used and more than 250,000 tons is used for export purposes, which together accounts for 680,000 tons, so that of the total production last year, about 80,000 tons went into the stocks. Now, however, the prospects of the Austrian petroleum export trade are particularly promising, and the exports could easily be brought up to 150,000 to 180,000 tons of refined oil, corresponding to 320,000 to 400,000 tons of crude oil, and thus an annual output of 800,000 tons could be easily disposed of. A sale can always be found for crude oil, but in the event of an over production, prices would be depressed and it would become a question of exporting the surplus at almost any price. At present the prospects of the market are that groups of refiners who are working for the formation of a new cartel, are offering to the producers a minimum price for their crude oil of 35 kronen per ton delivered at Boryslaw. After this oil has been treated at the refineries and sold in the form of products, the net proceeds, after deducting 40 francs per ton as the cost of refining, are to be divided equally between the producer and refiner. It is hoped that an agreement will be arrived at on the basis of these terms by which, it is estimated, the producer would realise for his crude oil a net price of about 45 francs per ton.

LONDON OIL SHARE MARKET.

FRIDAY, APRIL 12TH, 1907.

Since the resumption of business after the Easter Vacation, dealing in Oil Shares has been restricted to the smallest compass, quotations day by day being merely repetitions of previous ones, with the exception of Californian Oilfields, which registered a smart advance in the early part of the period, and in which Californian Refineries participated in a lesser degree.

It is hoped that the reduction in the Bank Rate yesterday to $4\frac{1}{2}$ per cent. is but the commencement of cheaper money, and that with its advent an incentive will be given the public to buy Industrial Shares.

For the convenience of our readers we give quotations in full on Tuesday, April 2nd, when the markets opened after the holidays. Anglo-Russians 0-$\frac{1}{8}$, Assam Oil $\frac{1}{2}$-$\frac{5}{8}$, Bibi-Eybats, $\frac{3}{8}$-$\frac{1}{2}$, Debentures, 84-89, Baku Ordinary 2s. 3d. to 2s. 9d., Preference 4s. to 5s. (this figure being 6d. lower), Californian Oilfields $5\frac{1}{2}$-6, Refineries $1\frac{3}{4}$-2, European Preference $\frac{1}{16}$-$\frac{3}{16}$, Preference 82-86, Russian Ordinary 8s. to 9s., Preference 8s. 6d. to 9s. 6d., Debentures 89-92, Schibaieff Ordinary 4s. 6d. to 5s. 6d., Preference 2-$2\frac{1}{2}$, Shell Transport Ordinary 41s. 6d. to 42s. 6d., Preference $9\frac{1}{2}$-10xd., and Spies $\frac{15}{32}$-$\frac{17}{32}$. On the two following days Californian Oilfields rose to $5\frac{3}{4}$-$6\frac{1}{4}$, then 6 to $6\frac{1}{2}$, and finally to $6\frac{1}{4}$-$6\frac{3}{4}$, while on Thursday the Refineries improved $\frac{1}{8}$ to $1\frac{7}{8}$-$2\frac{1}{8}$, and Baku Ordinary gained 3d. at 2s. 6d. to 3s., but since then no changes have occurred.

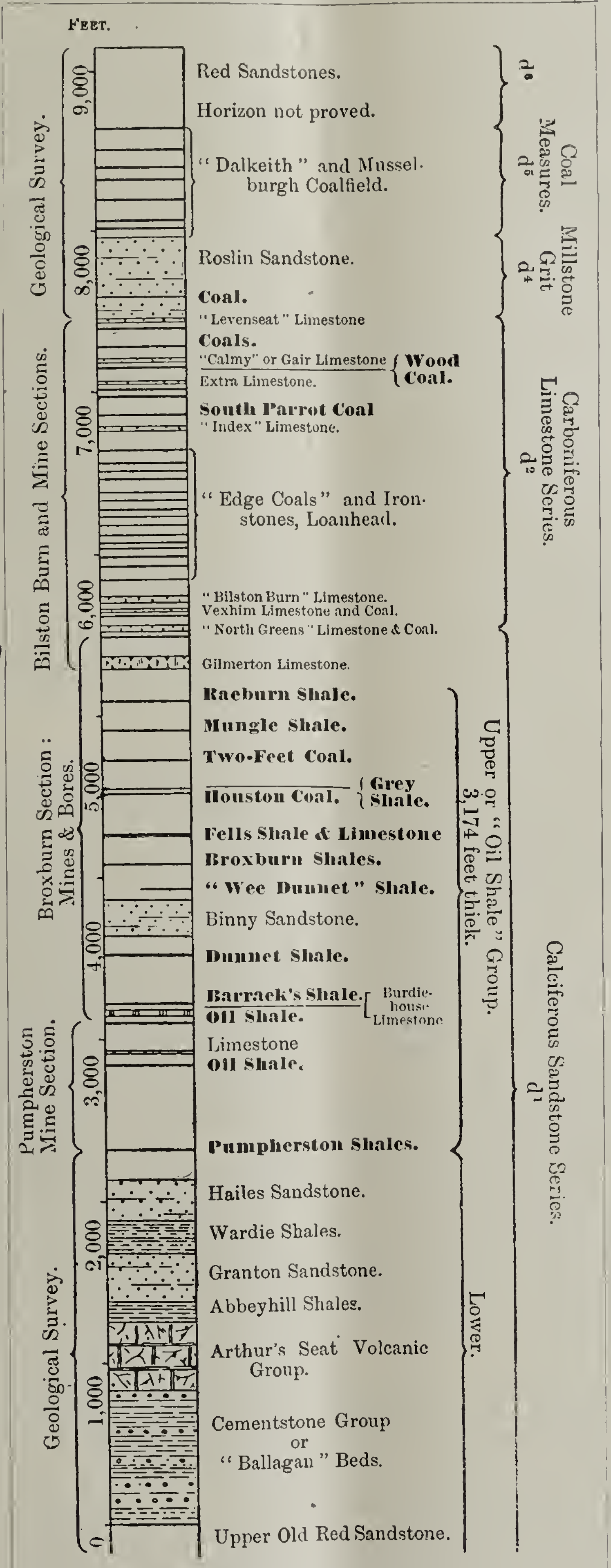
At the Mid-April Settlement, which commenced on Tuesday last, general rates of interest were decidedly lower than for several previous accounts, Oil Shares being continued at about 6 per cent. to 8 per cent. The volume of business to be adjusted in the Miscellaneous Market was of the smallest possible dimensions, and comparisons of "making up" prices in the Oil Share Section with those of end April are unimportant, with the exception of Californian Oilfields, which register an advance of $\frac{5}{8}$ at $6\frac{7}{16}$, while Baku Ordinary and Preference both rose 3d. at 3s. and $\frac{1}{4}$ respectively. On the other hand, Russian Ordinary at 8s. fell 9d., and the Preference at 9s. declined 6d., Schibaieff Ordinary losing a similar amount at $\frac{1}{4}$, Anglo-Russians at 1s., Schibaieff Preference at $2\frac{1}{8}$, Shell Transport Ordinary at $2\frac{3}{32}$ and Spies at 9s. 9d. all being without change.

More Strikes.—On March 29th a strike broke out on the property of the Baku Russian Petroleum Co., Ltd., at Bebe-Aibat. The blacksmiths at Nobel's engineering works have also gone out on strike.

Progress at Dambovitza.—The production of crude oil in the Dambovitza district of Roumania in February amounted to 18,522 tons, to which the Regatul Roman Co. at Moreni contributed 13,841 tons, and Messrs. Plyte and Co. 2,350 tons, and the International Co. at Gura Ocnitza 1,820 tons.

THE GEOLOGY OF THE OIL SHALE FIELDS OF SCOTLAND.

In our recent issues we have referred at some length to the various features of the publication which deals with the oil shales of the Lothians. In completing our summary of this highly-instructive Government publication, we would briefly touch upon the first part of the work, which is from the joint pens of Mr. H. M. Cadell, B.Sc., and Mr. J. S. Grant Wilson, and which is confined to a very lucid explanation and description of the geology of the various oil shale fields. Perhaps a little explanation is needed why we have left what is essentially the first portion of the work under notice to the last, but after carefully perusing this valuable addition to the literature of the Scotch oil shale industry we came to the conclusion that, inasmuch as our reference to the work would extend over several issues, it would be preferable if we first touched upon those portions of the book which dealt with the methods of working the shales, the chemistry of the shales, and also the process of manufacture.



Vertical Section of the Carboniferous Strata of Mid and West Lothian.

The oil shale industry of Scotland, the authors point out, is now mainly located in a belt of territory about six miles broad, that stretches from Dalmeny and Abercorn on the shores of the Firth of Forth, southwards across the fertile tract between the river Almond and the Bathgate Hills to the moorland district of Cobbinshaw and Tarbrax. Throughout this region there are various important mining centres, such as Broxburn, Uphall, East Calder, Mid-Calder, West Calder and Addiewell, with large populations mainly dependent upon this branch of economics for their support.

The rapid development of the oil shale industry in the Lothians within the past forty years is strikingly exemplified by the fact that when those portions of Mid-Lothian and Linlithgowshire were first mapped out on behalf of the Geological Survey in 1857, not one of the existing oil shale fields in the calciferous sandstone series was then being worked. The important discovery, which ultimately led to an active search for oil shale, had been made that oil could be obtained by distillation from the Torbanehill mineral, a seam near the base of the coal measures in West Lothian.

The shale measures on which the Scotch industry depends form part of the calciferous sandstone series of Mid and West Lothian and the southern coast of Fife. The carboniferous system in Scotland may be arranged in descending order in four divisions as under:—

(4) Coal measures, comprising red sandstone, shales and marls with no workable coals, underlaid by white and grey sandstones and shales with numerous valuable coal seams and ironstones.

(3) Millstone grit, consisting of coarse sandstones with beds of fireclay, a few thin coals, ironstones and thin limestones.

(2) Carboniferous limestone series, embracing three subdivisions, the highest of which contains three or more limestones with thick beds of sandstone and some coals, the middle includes several valuable seams of coal and ironstone, and the lowest is characterised by several beds of marine limestone with sandstone, shales, some coals and ironstones.

(1) Calciferous sandstone series, forming two subdivisions. The upper, known as the oil shale group, is over 3,000 feet in thickness, and contains, in its highest part, beds of coal usually of inferior quality, and farther down, about six main seams of oil shale, inter-stratified with beds of sandstone, shale, fireclay, marl and estuarine limestones.

Although the calciferous sandstone series is well developed in other parts of Scotland, it has not hitherto yielded any oil shale of economic importance beyond the limits of West Lothian, Mid-Lothian and Fife. Thin seams of oil shale occur in various places in the counties of Haddington and Berwick, but the quantity is not sufficient to be profitably worked.

In the largest and most important areas in Linlithgowshire and the adjoining part of Mid-Lothian, it is found that the western boundary of the shale measures is marked by the outcrop of the Hurlet limestone, which trends northward from the Cobbinshaw reservoir to the Firth of Forth—a distance of about 15 miles. Along the eastern margin there is no well-defined limit, and the base of the productive shale measures is consequently largely conjectural. The. measures, however, can be distinctly traced across the river Almond into the western part of Edinburghshire, but, on account of the deep covering of drift and the rarity of natural sections, the authors of this part of the work have no means of ascertaining the exact relationship between the strata of the shale fields and the underlying rocks in the neighbourhood of Edinburgh. Oil shale has been found both in the coal measures and in the carboniferous limestone series of Scotland, and has been wrought at various localities together with seams of coal and ironstone. At present, however, not one of those shales is considered workable, and the seams of value all occur in the calciferous sandstone series.

With reference to the physical characters of oil shale, the authors point out that this shale, as known in the Lothians, is a fine black or brownish clay shale, with certain special features which enable it to be easily distinguished in the field. Miners draw a distinction between "plain" and "curly" shale, the former variety being flat and smooth, and the latter contorted or "curled" and polished or glossy on the squeezed faces. The same seam may be partly plain and partly curly, and the curly beds are often richer in oil than the plain portions. In internal structure, oil shale is minutely laminated, which is apparent in the "spent shale" after distillation, when it is thrown out in fragments, composed of extremely thin sheets, like the leaves of a book. In thickness, the shale seams vary greatly. At certain localities they disappear and pass into ordinary carbonaceous blaes, and at others they swell into six, ten, or perhaps fifteen feet in thickness, with sub-divisions of barren blaes or ribs of hard calcareous or quartzose "kingle."

There are certain broad general features which may be said to characterise the geological structure of the shale measures of West Lothian and the adjoining part of Mid-Lothian. Along the western margin between Abercorn, on the Firth of Forth, and the Cobbinshaw reservoir, the members of the oil shale series pass underneath the carboniferous limestone series with the associated laws and tuffs, while to the east thereof they are arranged in a series of folds, the axes of which generally run in a N.N.E. and S.S.W. direction. By means of these undulations, the oil shales are spread over a belt of country several miles in width, and hence the mineral wealth of that district has been greatly increased. These arches and troughs are traversed by several more or less powerful faults, traceable for miles, which, at certain localities, produce large displacements of the strata.

In these regions there are four important dislocations, all of which have a general easterly or north-easterly trend, and, with one exception, have a common downthrow to the north. The most southerly of these parallel lines of disruption is the Murieston fault, which has a downthrow to the north, and runs from near Baads Mill, north of Cobbinshaw reservoir, in a north-east direction towards Kirknewton. That it must have a large amount of displacement, proceed the authors, is evident from the fact that near Skivo, about three miles south-west of Mid-Calder, it brings the Burdiehouse limestone and associated strata on the north into contact with the lavas and tuffs of Corston and Linhouse water, which have been correlated with the volcanic rocks of Arthur's Seat.

The next dislocation is the Calder fault, which has a nearly parallel course to that just described, with a smaller downthrow in the same northerly direction. At Mid-Calder it truncates the basin of oil shales on the south, and there brings down beds overlying the Broxburn shale against strata below the horizon of the Burdiehouse limestone—a displacement probably of about 900 feet. South-westwards it has been traced across the West Calder field by Hermand and Little Hartwood to the north of Baads Mill where it apparently dies out.

Still further north the Middleton Hall fault is encountered, this extending from near Dechmont, about a mile and a-half north of Livingston, in an E.N.E. direction to Middleton Hall. The amount of displacement at Middleton Hall is 1,566 feet, where beds not far below the horizon of the Hurlet limestone are brought against strata associated with the Broxburn shale. The fourth line of disruption occurs in the northern part of the shale field, and is termed the Ochiltree fault. The major fractures are accompanied by a series of east and west faults which shift the outcrops of the oil shales to a considerable extent at Midhope, Niddry, Ecclesmachan and Addiewell.

At a future time we may refer to this portion of the work of the Geological Survey at greater length, for the detailed description of the various fields as given by the joint authors of the first portion of the publication is of considerable interest, but for the present we cannot do more than give, as we have now done, but a few of the more salient points there enumerated.

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The Russian Petroleum Export Trade.

The Relation of the Export Railway Rate for Kerosene.

The question of the railway rates on Russian petroleum products destined for export, which has for such a long time been under discussion in the press, and by various committees, commissions and conferences, is still far from being cleared up. Different people look upon this question from different standpoints, which is inevitable in view of the various conflicting interests bound up with the subject —those of the exporters and of petroleum firms in general, of the State, shipowners, home consumers of petroleum products, case manufacturers, etc. The conflicting nature of the interests cannot be removed, but what is possible and necessary is to make clear the influence which the railway rates have at different times on the export trade, to determine the cause of the decline in the exports during the last few years, and also the probable consequences of its development in the future.

The lowering of the export rate is naturally strongly advocated by the petroleum producers; their arguments being already so well known that there is no need to refer to them here.

The Treasury occupies a double position in this matter. The falling off in exports affects unfavourably the trade balance of the country; on the other hand, the lowering of this rate threatens the Treasury with a loss of revenue, as the carriers of the goods to be exported. Hence the natural striving of the Government to fix a maximum rate, which, however, should not hinder the development of the export, the more so as even from the point of view of the carrier it is more advantageous to carry a large quantity of goods at a lower rate than an insignificant quantity at a high rate.

The home consumers of petroleum products are not directly interested in the question of a low or high export, except in so far as the encouragement of the petroleum export trade may affect the petroleum markets at home. But, even from this point of view, their conclusions differ, whilst some expect to profit by the development of the export trade, others expect to do the same by its diminution. The representative of the Moscow manufacturers at a recent conference supported the petition of the petroleum producers for a reduction in the export rate, maintaining that measures favouring the increased export of kerosene are advantageous to the Moscow manufacturers, as they tend to increase the output of residuals. Another view is that the increased export would diminish the quantity of petroleum products available for the home markets, those holding this view are in favour of retaining the present export, and even recommend the imposition of an export duty on kerosene.

In the press, conflicting opinions are also expressed, some of them being entirely erroneous. For instance, a writer in the *Novoie Vremia* maintains that the falling off in petroleum exports was due entirely to the fact that during the last few years there was no oil to export, in consequence of the disorders at Baku.

We do not know of any serious disorders at Baku prior to 1905, with the exception of the strike in December, 1904, and if there were any, they left little or no trace on the export trade, but it was just in 1904 that the falling off in exports began, so that it could have no connection with the disorders. In any case, disorders at Baku can affect the exports from Batoum only in the event of the deliveries from Baku falling short of the quantities shipped from Batoum, but in 1904 exactly the reverse was the fact. At no time did the arrivals of oils at Batoum exceed the shipments to such an extent as in 1904. This is clearly shewn in the following figures for the years 1902 to 1904 inclusive:—

		Arrivals of Pètroleum Products at Batoum. (In million poods.)				Shipments of Petroleum Products from Batoum. (In million poods.)		
		Illuminating Oils.	Other Products.	Total.		Abroad.	To Russian Ports.	Total.
1902	..	68·4	11·7	80·1	..	78·3	5·5	84·2
1903	..	67·9	14·3	82·2	..	78·4	3·8	82·2
1904	..	74·5	12·3	86·8	..	75·5	4 0	79·5

The result of such forced deliveries from Baku simultaneously with a declining export was an unprecedented accumulation of stocks towards the 1st of January, 1905, as is shewn below:—

Stocks on 1st January		Illuminating Oils.	Lubricating Oils. (In million poods.)	Other Products.	Total.
1903	..	7·3	0·9	0·2	8·4
1904	..	6·6	2·1	0·3	9·0
1905	..	12·8	1·4	0·2	14·4

To the above figures it may be added that the shipments of petroleum products from Batoum to foreign ports in the second half of 1904 shewed a decline against the first half of the same year by 5·3 million poods, and against the second half of 1903 by 8 million poods, the figures being:—First half of 1904, 33·4 million poods; second half of 1904, 28·1 million poods; and second half of 1903, 36·2 million poods.

It is clear from the above that the decline in exports in 1904, particularly marked in the second half-year began in the first half, and was quite unconnected with conditions at Baku.

It is likewise erroneous to attribute the decline in exports to the appearance on the markets of oils from Java and Sumatra, as is maintained by some parties. This, of course, threatens the Russian oil trade with the total loss of Far Eastern markets, yet could not affect the European markets. But it was on some of the European markets that Russian kerosene was in 1904 displaced by its competitors, as is illustrated by the following figures:—

			To England and Malta.		Belgium and Holland. (In million poods.)		To Germany.
1903	..	..	21·9	..	5·3	..	1·4
1904	..	..	17·8	..	5·0	..	1·7
Decrease in 1904.			4·1	..	0·3	..	0·7

For 1905, too, it is out of the question to accept the

Baku disorders as the sole cause of the declining exports. During that year disturbances were frequent at Baku, and in the August the oil field fires were caused, while pillage also took place, these events entirely breaking up for a time the whole organisation of the export trade; but it must be remembered that before the August riots the exports were very small. The stocks at Batoum did not decline, notwithstanding the small arrivals from Baku. They almost proved sufficient to meet the demand from abroad, as is illustrated in the following table:—

Illuminating Oils (in million poods)

1505.	Arrivals at Batoum.	Shipments from Batoum.	Stocks at Batoum.	Stocks at Baku.
January	2·5	3·3	12·9	16·5
February	3·2	1·8	10·5	19·9
March	5·2	3·3	13·1	24·2
April	2·1	3·7	14·5	23·1
May	4·2	2·9	12·1	20·9
June	1·4	1·7	12·2	15·7
July	1·0	4·0	11·9	14·3
Total for 7 months, 1905	19·6	20·7	—	—
Total for 7 months, 1904	—	37·5	—	—

The above facts and figures dispose of the contention that the exports fell because there was nothing to export. At the same time it does not mean that the sole cause of the abnormal condition of the export trade is the railway rate, the raising of which to 19 copecs per pood coincided with the beginning of the displacing of Russian oil from foreign markets. The raising of the tariff undoubtedly very largely contributed to the decline in exports, but even at the former rate of 16 copecs per pood Russian oil found it difficult to keep its place on the foreign markets owing to the severe competition which ensued after the successful year of 1903. Apparently the profits earned by the exporters gave the Government the idea of raising the railway rate, but this was done at a most inopportune moment when the Standard Oil Co. opened a determined fight against its competitors.

The increased railway rate played into the hands of the competitors of Russian oil on the foreign markets by depriving the price of all elasticity, so that when the Baku riots broke out they found the ground prepared for completing the ruin of the export trade.

We will now deal with the various views concerning the possible effects which the development of the kerosene export trade may have on the home markets.

The opinion expressed by the Moscow Chamber of Commerce that it is desirable in the interests of the home consumers that there should be a large export trade is not quite correct. It is a fact that every pood of crude oil yields a certain proportion of kerosene and residuals, but the relation between the two may be varied; the more kerosene you distil off, the less residuals is there left, and *vice-versa*, and this is regulated by the market conditions for one or the other product. Mr. Pershke, Chief of the Excise Bureau on the Caucasus, in this connection says as follows:—

"The loss of the foreign markets and the consequent absence of demand for export kerosene lowered the price of kerosene, bringing it down to the level of the price of crude oil and even lower. Adjusting itself to such conditions, the petroleum refining industry had to assume chiefly the character of a fuel oil industry, by cutting down the deliveries of kerosene to the lowest limits answering more nearly to the requirements of the home markets. Owing to this, in 1905, there were altogether produced 75·8 million poods of kerosene, against 156,000,000 poods in 1904. The whole interest of the industry rested on the residuals, the demand and price of which rose steadily. The crude oil at most of the refineries barely had the benzine removed from it, and the mazout, light as it is, further had some crude oil added to it. This explains the figure of 4·31 poods of crude oil required for producing one pood of kerosene in 1905, against 3·29 and 3·25 poods for 1903 and 1904 respectively; the extra pood of crude oil was not distilled at all, but merely added to the residuals, when the latter were ready for shipment."

In full accord with the above are the following figures of the yield of various products from the crude oil at the Baku refineries during the years of 1903 to 1905:—

Output of Products (In per cent.)

	Illuminating Oils.	Residuals.	Other Products.	Total.
1903	32	63	5	100
1904	30	65	5	100
1005	20	75	5	100

Therefore when quite normal conditions prevail, it is clear that the extension of the sale of kerosene leads to a reduction in the output of residuals, and it is wrong to assume that an increased export of kerosene must have as its direct result an increased supply of residuals to the home markets. It is, however, still more erroneous to assume that the extension of the export trade must prove detrimental to the interests of the home consumers. The home consumers would gain nothing even if the export trade were entirely suppressed. The treatment of the crude oil at the refineries must result in the production of certain quantities of illuminating and lubricating oils, only a small part of which is consumed in Russia. The larger part has necessarily to be exported, and should this outlet be closed, an over-production would ensue, resulting in a crisis in the petroleum industry worse than the one created by the burning and pillaging of the oil fields. So long as the conditions preventing the growth of the consumption of illuminating oils in Russia continue, in the form of a heavy excise duty, and the small purchasing capacity of the bulk of the population, so long will the export trade continue to be indispensable. Only by being able to send large quantities of illuminating and lubricating oils to foreign markets will the petroleum producers find to their advantage to use every effort to enlarge the output of these products, and for this purpose also the production of crude oil, which would be to the advantage of the home consumers, and yield a substantial revenue to the Transcaucasian Railway.

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AMERICAN NOTES

The Canadian Pacific Oil Company has recently been organised at Los Angeles with a capital of $2,000,000 having bought the lands and wells of the Fidelity Oil Co. in the Whittier field.

The Gulf Pipe Line.—Rapid progress is being made in regard to the construction of the trunk pipe line for the Gulf Pipe Line Co., and north of Sour Lake no less than 25 miles have been already strung.

Early Completion.—It is now expected that one of the trunk pipe lines to the Gulf of Mexico will be in working order by the beginning of October. This is a date earlier than was at first looked forward to.

Oil Pioneer Dead.—By the death of Mr. James P. Smith, of Titusville, Pa., the last of those pioneers of the American petroleum industry associated with Colonel E. L. Drake in the drilling of the first oil well on Watson's Flats, has passed away. Mr. Smith had just reached three score years and ten.

A High Grade Texas Oil.—A number of wells in the Henrietta district of Texas are producing a high grade oil from a shallow stratum less than 300 feet deep. The daily output is approximately 300 barrels. The price which this oil is commanding makes drilling for this oil highly profitable.

Flood Devastation.—The flood devastation in the Ohio and West Virginia fields indicates that the property loss will reach a very large figure. At Warner pumping station, Washington county, two large tanks containing several thousand barrels of oil were swept away, while at Sistersville two 35,000 barrel tanks were carried away.

Powell Production Sold.—A communication to a contemporary journal from Corsicana, Texas, declares that the whole of the production from the Powell field has been sold for one year ahead. The field is now producing about 2,000 barrels per day. The demand for fuel oil in north Texas is keener than it ever has been, and the Powell production therefore finds a ready market.

The Romney Field.—There are now seven producing wells in the Romney field—Canada's latest acquisition to oil territory. The total production is put at 2,500 barrels per day. The locality is experiencing something approaching an oil boom, for, in addition to a number of wells now being drilled, 15 other locations have been made, and will be drilled as soon as material can be got to the ground.

Another Californian Refinery.—The *Coalinga Oil Record* states that it learns on reliable authority that another refinery is to be built for the Californian oil trade, this being situated in Coalinga. The identity of those persons interested has not as yet been made public property, but the fact that a refinery is to be built at Coalinga is received with much satisfaction by the oil men of the Coalinga field.

Projected New Asphalt Refinery.—The *Pacific Oil Reporter* records the consummation of a large deal in oil property in the Midway field by the terms of which the Monarch Oil Co. becomes the owner of the entire holdings of the Occidental Oil Co. in the Sunset and Midway fields. The Monarch is to begin the work of constructing the largest asphalt refinery in the State on the property just acquired.

Canadian Prospects.—A writer in the *Petrolia Advertiser* states that the outlook for the Canadian petroleum business is very bright, in fact the industry never witnessed a season that promises so many results. The Canadian field promises to be the most active of any of the many oil fields on the North American Continent, though all of the newer fields, as well as the older territories, will be scenes of great activity.

The Arroyo Grande Field.—Excitement is rife in the Arroyo Grande Field since oil has been found in the shallow depths of the Tiber wells. Instead of the shale formations in which oil is found in the deep Santa Maria fields, the oil in the Tiber wells is found in coarse oil sands quite similar to those of the Kern River fields, and resembling it also in the relative shallowness of the wells. Many companies have been formed to drill near the successful Tiber wells, and drilling is already proceedingly actively.

AMERICAN PETROLEUM EXPORTS.

STATISTICS FOR FEBRUARY.

According to the official publication of the Washington Bureau of Statistics, the exports of petroleum from America from the various ports during February were as under:—

	1906. Quantities. Gallons.		1907. Quantities. Gallons.
CRUDE—			
Baltimore	—	.. ..	—
Boston and Charlestown	—	.. ..	—
Delaware	5,682,200	.. ..	—
New York	12,983	.. ..	—
Philadelphia	1,493,145	.. ..	3,645,587
Galveston	5,306,542	.. ..	3,557,256
Total	12,494,870	Total ..	7,202,843
Total value for the month, 1906..		.. ..	$683,652
,, ,, ,, 1907..		.. ..	$393,854
NAPHTHAS—			
Baltimore	—	... ..	—
Boston and Charlestown	—	.. ..	—
Delaware	41,565	.. ..	—
New York	492,582	.. ..	619,517
Philadelphia	457,623	.. ..	1,385,794
Galveston	—	.. ..	—
Total	991,770	Total ..	2,005,311
Total value for the month, 1906 ..		.. ..	$103,591
,, ,, ,, 1907 ..		.. ..	$180,403
ILLUMINATING—			
Baltimore	15,155	.. ..	—
Boston and Charlestown	95,497	.. ..	7,899
Delaware	2,625	.. ..	—
New York	34,352,415	.. ..	45,303,654
Philadelphia	13,574,151	.. ..	24,840,332
Galveston	—	.. ..	1,710,927
Total	48,029,843	Total ..	71,862,812
Total value for the month, 1906		.. ..	$3,010,497
,, ,, ,, 1907		.. ..	$4,434,642
LUBRICATING—			
Baltimore	574,750	.. ..	339,500
Boston and Charlestown	8,222	.. ..	12,355
Delaware	—	.. ..	—
New York	9,641,662	.. ..	7,268,551
Philadelphia	2,800,010	.. ..	3,096,121
Galveston	907,952	.. ..	—
Total	13,932,595	Total ..	10,716,527
Total value for the month, 1906		.. ..	$1,771,781
,, ,, ,, 1907		.. ..	$1,341,243
RESIDUUM—			
Baltimore	—	.. ..	—
Boston and Charlestown	—	.. ..	—
Delaware	1,515,740	.. ..	—
New York	—	.. ..	53,600
Philadelphia	658,688	.. ..	1,370,812
Galveston	2,880,150	.. ..	1,473,585
Total	5,054,578	Total ..	2,897,997
Total value for the month, 1906		.. ..	$146,254
,, ,, ,, 1907		.. ..	$96,364
TOTAL MINERAL OILS—			
Baltimore	589,905	.. ..	339,500
Boston and Charlestown	93,179	.. ..	20,254
Delaware	7,242,130	.. ..	—
New York	44,499,642	.. ..	53,245,322
Philadelphia	18,983,617	.. ..	34,338,646
Galveston	9,094,644	.. ..	6,741,768
Total	80,503,657	Total ..	94,685,490
Total value for the month, 1906		.. ..	$5.715,775
,, ,, ,, 1907		.. ..	$6,446,506

PETROLEUM IMPORTS INTO YOKOHAMA.

The imports of petroleum products into the port of Yokohama during January of this year amounted to 1,080,946 gallons, and were valued at 194,570 yen, as against an importation of 1,361,606 gallons during January, 1906, at a value of 295,553 yen.

MISCELLANEA.

GALICIAN PRODUCTION DURING JANUARY.

The production of crude oil at the Galician oil fields in January and the stocks at the end of that month were as under (in tons):—

	Production in Jan.	Stocks on Jan. 31st.
West Galicia—		
Potok	1,310	3,324
Rogi	420	3,976
Rowne	94	143
Tarnawa-Wielopole-Zagorz ..	1,234	4,421
Krosno	2,355	10,847
Other West Galician Fields ..	2,210	6,862
East Galicia—		
Boryslaw-Tustanowice	53,070	361,655
Schodnica	3,300	13.057
Urycz	1,280	8,485
Mraznica	120	496
Other East Galician Fields	1,020	1,100
Total	66,413	414,366

The total stocks of crude oil have during the month increased by 11,462 tons. The Boryslaw-Tustanowice field was solely responsible for this increase in stocks. At all the other fields the stocks have either declined or remained stationary. The quantity of oil lost or used as fuel at the wells in January amounted to 4,610 tons, of which 3,350 tons were at Boryslaw and Tustanowice.

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CONDITION OF THE BAKU OIL FIELDS ON 1st JANUARY, 1907.

The condition of the Baku oil fields on the 1st of January, 1907, is shewn in the following table, giving the number of wells producing, in drilling, etc., on that date:—

	Balakhany.	Saboontchi.	Ramany.	Bebe-Aibat.	Binagadi.	Total.
In Exploitation ..	630	597	199	204	12	1,642
,, Drilling	32	137	59	133	—	361
,, Deepening or repair	37	62	36	60	—	195
,, Cleaning while in exploitation ..	3	6	1	3	—	13
,, Cleaning or repair while drilling ..	6	23	10	9	—	48
,, Trial baling ..	14	19	4	7	—	44
,, Water shutting ..	—	4	3	1	—	8
,, Inactive.. ..	442	717	177	62	7	1,405
Derricks in construction ..	21	8	7	7	—	43
Total ..	1,188	1,577	497	486	19	3,767

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THE GROSNY REFINING INDUSTRY IN 1906.

During last year the refining of petroleum in Grosny was carried on at three refineries, namely, that of the Vladicaucasian Railway Co., the Akhverdoff Co. and of Mr. Herman (late Uspiech). The refinery of the Kasbeck Syndicate did not treat any crude oil, its operations being restricted to the disposing of its available stocks of petroleum products.

The turnover of these refineries is shewn in the following figures:—Crude oil pumped from the wells to the refineries during 1906, 29,512,897 poods; other oils mixed to the crude oil, 2,135,305 poods; crude oil distilled, 29,602,159 poods; other materials distilled, 4,150,419 poods. From the above quantity of materials the following distillates were obtained:—Kerosene, 2,524,537 poods; benzine, 1,770,423 poods; gasolene (for redistillation), 4,147,847 poods; ligroin, 2,009,595 poods; residuals, 22,582,692 poods. The consumption of fuel was 1,375,604 poods, or about 3 per cent., while the loss in distilling was 1,197,602 poods, *i.e.*, 2½ per cent.

The refined products obtained were as under:—Kerosene, 2,598,494 poods; benzine, 313,313 poods. Chemicals used for refining:—23,555 poods of sulphuric acid, 6,940 poods of caustic soda, and also 3,520 poods of fuming sulphuric acid.

The deliveries of petroleum products from the Grosny district during 1905 were as follows:—In bulk by rail there was dispatched, crude oil (exclusively by the Akhverdoff Co.), 1,160,518 poods; kerosene, 2,804,371 poods (refined and unrefined); benzine (refined and unrefined), 1,208,640 poods; residuals, 22,143,516 poods; ligroin, 2,646 poods. In barrels, by road and rail, there was dispatched from Grosny:—Crude oil, 95,865 poods; kerosene, 104,820 poods; residuals, 15,892 poods.

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THE GROWING POPULARITY OF DIESEL OIL ENGINES.

SUBSTANTIAL FIGURES.

The largest number of Diesel engines is produced by the engineering works in Augsburg, Germany. During the period from 1898 to 1st February, 1906, these works produced Diesel engines of an aggregate of 47,000 horse-power, of this 19,750 horse-power was for Germany, 24,250 horse-power for Russia, and 3,000 horse-power for other countries.

The number and size of the engines produced has been growing steadily from year to year, as may be seen from the following figures:—

	Horse-power.		Horse-power.
1898 to 1900 ..	450	1905 ..	.. 13,200
1901	850	1906 ..	.. 14,800
1902	1,700		
1903	5,200	Total	.. 47,000
1904	10,800		

The engineering works of Messrs. Nobel Bros. in St. Petersburg, the only firm building Diesel engines in Russia, have during the period from 1900 to 1st February, 1906, produced engines of an aggregate of 13,260 horse-power, namely:—

	Horse-power.		Horse-power.
1900	250	1904 ..	.. 3,823
1901	480	1905 ..	.. 3,375
1902	970	1906 ..	.. 2,592
1903	2,120		

The two firms together during the six years produced Diesel engines of an aggregate of 60,260 horse-power.

The largest engine built at the Augsburg works was a four-cylinder engine of 1,000 horse-power, whilst the largest built by Nobel Bros. was of 600 horse-power.

The Union Oil Company of California.

The Annual Report. . .

(Special to the "PETROLEUM REVIEW.")

The annual report of the Union Oil Co. of California has just been published, and contains many items of general interest to the members of the petroleum industry. In the first place, it states what must have been almost common knowledge, that during the past year the company has made substantial progress which has been the most satisfactory of any in the company's history.

From the auditor's statement one finds that the total dividends paid for the twelve months amount to $561,109, or 15 per cent., net earnings on the outstanding stock for $468,369 is carried forward. For the previous year the dividends amounted to $392,556, and the amount carried forward was $608,840. After paying the dividends of 1906, the amount used for betterment and increase of plant has been $452,591. The total dividends paid by the company, including the one for the past year, amount to a sum of $2,427,017.

The report then goes on to give in detail the holdings of the company in various other concerns. This statement shews that the company owns half the stock in the John Irwin Oil Co., the United Steamship Co. and the Californian Coast Oil Co., while it owns practically all the stock of the Mission Trans. and Refining Co., the Union Transportation Co., the Mission Transfer Co., the Pioneer Pipe Line Co., the Union Steamship Co., the Surf Oil Co. and the Union Well Supply Co., as well as being interested to the extent of more than one-half in the Union Oil Tool Co., the Claremont Oil Co., the Los Angelos Oil Co., the Newlove Oil Co. and the Old Keystone Oil Co., in which latter concern it owns nine-tenths of the shares.

From the report of the company's engineer and geologist it is seen that the company controls land to the extent of over 188,696 acres, of which 74,000 acres are in Santa Barbara county and 72,000 acres in Ventura county. Much of the above land has, of course, not been tested for petroleum producing purposes, but the company is certain that it has many thousands of proven rich oil lands, one tract of which has produced over 60,000 barrels, and is still producing 10,000 barrels per acre per annum, while in the Santa Maria field the company has one well which during the first 18 months of its existence gave over 1,500,000 barrels, and is still producing at the rate of 100,000 barrels per year.

With regard to the company's pipe line holdings, the report states that it possesses one six-inch line connecting the Santa Maria and Lompoc oil fields with tidewater at Port Harford; it has a four-inch line connecting various fields and districts with tidewater at Ventura, a six-inch line connecting Los Angeles with tidewater at San Pedro (and smaller lateral lines running into the Fullerton and Whittier fields); a line connecting the Coalinga field with the railroad at Ora station; two eight-inch lines connecting the Kern field with the railroad, and the 51 miles of eight-inch pipe across the Isthmus of Panama, while in addition it is constructing other lines to facilitate the transport of oil from the various producing territories.

The water-front properties of the company are at San Francisco, Oleum, Port Harford, Avila, Point Sal, Ventura, San Pedro, Portsmouth (Portland, Oregon) and at San Diego, while it has storage accommodation at Seattle, Astoria, Portland, San Francisco, Stockton, Oleum, Port Harford, Ventura, San Pedro, San Diego, Panama, Colon (these being in connection with the Pacific-Atlantic pipe line), Honolulu, and Kihei.

The fleet of tankers now owned by the company has a carrying capacity of over 280,000 barrels, while the refineries at Oleum and Bakersfield which have a combined capacity for handling 5,000 barrels per day, have, during their past year, been run to their full capacity.

As is stated at the outset, the company has made great progress during the year. It has secured several properties in the Santa Maria, Whittier and Fullerton fields, and has drilled 75,000 feet, the major portion of which is in Santa Barbara county, the number of producing wells completed being 27. It has added to its storage accommodation 700,000 barrels of steel tankage, 300,000 barrels of which is at the Isthmus.

But perhaps the most interesting part of the report to English readers is that from Mr. J. Baker, the manager of the manufacturing, sales and marine departments. It may here be mentioned that to this gentleman belongs the credit for the pipe line across the Isthmus of Panama, a remarkable piece of engineering skill which has been successfully completed, the line now being ready for oil transport.

Speaking of the company's foreign business, Mr. Baker says that with the vast increase in their refining, transportation and distributing facilities, they are prepared to handle a large increase in their business, and he predicts that the company's earnings for 1907 will prove the wisdom of the expansion policy which has been strictly adhered to. In the short space of twelve months their company has risen (he continues) from local to national importance, and at the present time occupies a leading position in the oil business of the world, for their transportation facilities, together with their Panama pipe line, enables them to reach the markets of the world. They are constantly in receipt of inquiries from foreign countries, which is the result of the prominence given to the Panama line by financial, commercial and technical journals.

Going on to speak of the policy of the company, the directors point out that the present advantageous position will be strengthened when opportunity permits, and the policy will necessarily be somewhat aggressive. It has been the policy of the company, while seeking to aid other producers in the marketing of their products, to keep its field work in such an active state of development that any combination formed against it could not seriously interrupt its business. In carrying out this line of policy, several of its large tracts of land will doubtless be developed during the present year.

Reference to the prospects for the present year forms the concluding sentences of the report, and in regard to this the report states as follows:—"As it is the unexpected that occurs, and circumstances beyond our control are always likely to arise, we realise that it is somewhat hazardous to venture a forecast even for one year. At the annual meeting we made the statement that if conditions should continue normal, we believed that the company's net earnings would be more than double those of any previous year. That opinion is founded not so much upon the improved price for oil as upon the fact that your company's transportation facilities would be doubled and its capacity for making refined oils practically quadrupled for this year's business."

The report bears the signature of Mr. Lyman Stewart, the company's president.

THE USE OF HEAVY OIL IN MOTOR CARS.

MR. STACKARD GIVES EVIDENCE BEFORE THE MOTOR FUELS COMMITTEE.

At a recent sitting of the Fuels Committee of the Motor Union of Great Britain and Ireland, Mr. S. F. Stackard, to whose new oil fuel burner we referred in our last issue, gave evidence regarding the possibilities of the use of heavy oil for motor cars. In reply to the Chairman, Mr. Stackard said that his firm, J. A. Curle, Ltd., had for three years been employing liquid fuel burners, but up to twelve months ago with only moderate success. During, however, the last twelve months, they had succeeded in perfecting a burner which had entirely met their requirements (which were of a difficult character—glass melting), and not only their own, but those of a number of other people who had adopted the burner.

Does this burner deal with heavy fuel in such a way that would enable it to be used for motor-car purposes?—I understand that the conditions for use in motor-cars and waggons are freedom from smell and smoke or any deposits, which indicate perfect combustion, and if this is the case I am able to say that our burners have, in every position in which they have been placed, entirely fulfilled the conditions.

May not your burners be used in furnaces with masses of heated matter around, as fire-brick and not exposed to contact with cold surfaces, as occurs in automobile boilers?—I am able to answer this question definitely, because such application is on a vertical boiler not in any way specially adapted for the purpose, and in this boiler the burner regularly starts from cold without the slighest trouble or indications of imperfect combustion. I attribute the excellent behaviour to the fact that the compressed air comes in from a reservoir surrounding an annulus of oil with an inner jet of air from the same tank as the outer annulus of air. The burner is more or less self-contained in action, and able to be introduced into a closed fire-box, thereby excluding all danger of interference from the outside, and practically obviating the use of a chimney—but only a small outlet.

Is there not from this burner a certain amount of roaring noise?—Undoubtedly, there would be a certain amount of noise if it were necessary to have a high air pressure, and if the chamber were not a closed one. As a matter of fact, very small pressure is necessary for a flash boiler, I believe only 6 lb. or 7 lb. per square inch, and I am of opinion there would not be appreciable noise. I may further say that we found by long experimenting that the consumption can be reduced by merely adjusting the valve, to almost any degree, without impairing the efficiency of combustion.

The witness went on to say that his firm had used creosote oil (from tar), green oil, and solar oil (crude from Asia Minor), Texas heavy oil, and crude tar.

Do you think that your burner could be used for vapourising commercial petroleum, or even heavier crude oils for use in internal combustion engines?—Having had practically no experience with internal combustion engines, I could not positively state the action that an electric spark would have upon a mixture issuing from the nozzle of my burner.

Is it not a fact that, most atomising liquid fuel burners, as opposed to vapourisers, give trouble on account of their clogging up, through carbonisation of the fuels in valves and orifices?—My experience is that such is often the case; this was my main obstacle to overcome, or, rather, this and the emission of smoke. The burner now in use will go on firing for an indefinite period without clogging and with perfect combustion.

* * *

ANOTHER "SHELL" COMPANY'S TANKER GOES OVER TO LIQUID FUEL.

A SUCCESSFUL INSTALLATION.

The oil tank steamer "Elax," one of the well-known fleet of oil-carrying vessels owned by the "Shell" Trading and Transport Co., which has for some weeks been undergoing extensive repairs and overhaul by Messrs. Smith's Dock Co., proceeded to sea a few days ago for official trial and demonstration of the efficiency of the liquid fuel burning installation fitted by the latter firm. The trial, which was attended by a numerous company of gentlemen, including Captain Coundon (superintendent for owners), Mr. De Puy (representing the Asiastic Petroleum Co.), Mr. Crohan (representing Messrs. Flannery, Baggallay and Johnson), and Mr. H. Darling, Mr. H. R. Cameron and Mr. C. Burge (of Smith's Dock Co.), proved eminently satisfactory to all concerned, steam being easily maintained at the required pressure to propel the vessel at a speed of 11 knots on a consumption of 14½ cwts. of liquid fuel per hour, this being equivalent to a consumption of only 17½ tons per day for all purposes, as against 30 tons of coal per day consumed for the same work on her previous voyages, a fact of considerable interest to shipowners and engineers, inasmuch as it brings out prominently the advantage to be gained by adapting the system of burning liquid fuel in place of coal. Sir Marcus Samuel, as our readers are aware, has worked strenuously in the past to advocate this system—both by experiment and practical working—in the large fleet of "Shell" Line steamers to prove its advantages for use in either merchant or Government vessels, and is to be congratulated on the fact that it is now firmly established as a useful and economical method of raising steam, and easily adapted to all classes of vessels. The "Elax," one of the medium sized vessels of the company, is 4,015 tons gross register, and capable of carrying some 5,500 tons of cargo, and is the eighteenth steamer of this fleet fitted for burning liquid fuel.

The installation, fitted by Smith's Dock Co., includes the Rusden-Eeles patent burners and the Flannery-Boyd patent system of heating coils and gravitation tanks for purifying the fuel before being conducted to the burners.

On the completion of the trial, the "Elax" returned to the Tyne, where she took in a large quantity of stores and then proceeded on a voyage East for a lengthened period.

GERMAN NOTES.

Reports from Berlin announce the formation of another petroleum company there under the title of Bank füer Naphta Industrie A.G. The founders are Messrs. H. L. Beerman, Max Loewy, Louis Brauns, merchants of Berlin, Julius Fraenkel, manufacturer, of Charlottenburg, and Hermann Stobwasser, manufacturer, of Berlin. Mr. Rapp, of Halensee, will be the manager The capital is 1,800,000 marks.

At the general meeting of the Celle-Wietze Actien Gesellschaft füer Erdoelgewinnung, the most important producing firm in the German oil fields, certain shareholders complained of the low market value of the company's shares, and suggested that an official quotation should be applied for on the Berlin Stock Exchange. The directors admitted the desirability of such a step, but consider the present moment inopportune. The company's production in January amounted to 854 tons, in February 1,000 tons, and in the first 20 days of March 687 tons. All the six boreholes sunk on the Hornbostel tract having struck oil, two more boreholes will be started there.

The Berlin correspondent of the *Moniteur du Petrole Roumain* is responsible for the statement, based on reports from New York, that the Standard Oil Co. intend to reduce the imports of illuminating oil to Germany and to increase the imports of crude oil, which will be refined at the refinery of the Vacuum Oil Co. at Schulau, which will also treat crude oil from the German oil fields.

The annual report of the directors of the Aschaffenhauseusher Bankverein contains the following reference to the petroleum enterprises in which they are interested:—In consequence of the continued growth of the petroleum industry in the Wietze oil field it is possible that a good part of the boring plant of the Internationale Bohrgesellschaft will be employed there. The Internationale Bohrgesellschaft has succeeded in combining several important producing firms in the Wietze oil field in the Deutsche Mineraloel-Industrie A.G., formed with a capital 16,000,000 marks.

THE ANNUAL REPORT OF THE ASSOCIATED OIL COMPANY.

The annual report of the Associated Oil Co.—a concern which operates extensively in the Californian fields—has recently been issued. It shews that the real estate owned by the company in the Kern River, McKittrick, Santa Barbara, Los Angeles and other fields amounts to over 54,000 acres, while during last year, 1906, the 227 producing wells of the company furnished a production of 5,500,000 barrels. The steel storage of the company has a capacity of 4,000,000 barrels, and at the time the report was compiled the oil on hand was 3,700,000 barrels, this being an increase of over 2,000,000 barrels as compared with the previous year. The pipe lines owned include 110 miles from Coalinga to Monterey (there being land tankage and wharf at the latter place), and 35 miles of line from Santa Maria to Gaviota, the refinery at the latter place having a capacity of 9,000 barrels daily.

During the year under review the company has purchased 2,630 acres of land in the Coalinga field, which, as the result of recent development, has proved to be first-class oil land, while, through subsidiary companies, the Associated has acquired control of a large acreage of valuable territory in the Santa Maria field.

The company has earned during the year $1,102,300.

THE LATEST INFORMATION FROM BAKU.

MORE SERIOUS STRIKES.

Some evil genius appears to be hovering over the Baku petroleum industry and preventing its return to normal conditions. No sooner did the strike movement at the oil fields subside than a fresh trouble broke out in the shape of a general strike of the crews on the vessels plying on the Caspian Sea. This strike is a very serious matter, as it has stopped all shipments of oils from Baku and also the deliveries of crude oil from the Bebe-Aibat field to the Black City refineries. Some of the Bebe-Aibat firms have had to cease producing owing to the overfilling of the storage reservoirs, there being no other means of transporting the crude oil to the refineries except by water. Strikes have also broken out afresh on some of the Balakhany properties. The sailors ask for increased pay, one day's rest weekly, etc. Owing to the low freights ruling for the transport of oil on the Caspian Sea, the shipowners are unable to concede these demands. The strike has broken out at a most unfortunate moment when navigation is re-opening on the Volga, and supplies of oil have to be hurried up to replenish the exhausted stocks in the interior. The stoppage of shipments at this moment cannot fail to enhance prices on the home markets. An early settlement of the strike is expected, in which case it will be possible to make up for lost time and avert a crisis.

OIL SHIPMENTS FROM THE UNITED STATES TO ALASKA AND HAWAII DURING JANUARY.

The shipments of mineral oils from the Pacific ports of the United States to Alaska and Hawaii during January amounted to 204,000 gallons of illuminating oil, 55,000 gallons of lubricating oil, 60,000 gallons of naphtha, and 390,000 gallons of crude oils. The total exports of domestic mineral oils from the Pacific ports during the month included 7,432,000 gallons illuminating oil, 13,400 gallons lubricating oil.

MESSRS. E. W. BLISS CO.'S NEW WORKS.

Our readers will kindly take note of the fact that the firm of Messrs. E. W. Bliss Co. are, in consequence of increasing business, removing their French works to Saint-Ouen, where in future their address will be 100, Boulevard Victor-Hugo. The new telegraphic address will be "Blissco Saint-Ouen," while the telephone number is to be 446—96.

RUSSIAN AND ROUMANIAN NOTES.

The Shipping Strike at Baku has made it impossible for any crude oil to be delivered from Bebe-Aibat to the Baku refineries, and in consequence of this the exploitation of wells at Bebe-Aibat has had to be restricted.

Roumania and Italy.—Numerous demands for residuals are coming to Roumania from Italy, owing to the reduction in import duty on this product provided in the recently concluded commercial Treaty between Italy and Roumania.

Fire at Bustenari.—On March 20th (o.s.) an outbreak of fire destroyed the derrick and plant on well No. 5 of the Telega Oil Co., at Bustenari. It was caused by the carelessness of a fitter. Fortunately no loss of life or limb resulted.

Better Late than Never.—On the 2nd April, Senator Mitzkevitch, Assistant on Civil Affairs to the Viceroy of the Caucasus, left Tiflis for Baku, in order to investigate the causes of the present strikes there, and take steps to terminate the same.

Roumanian Petroleum Deal.—Messrs. Stanescu and Guiglescu have sold their property at Bustenari to a group of French capitalists for a sum of 320,000 francs. The same group are also negotiating for the purchase of the properties of the Jalomitza Co., also at Bustenari.

The Refiners' Cartel.—A meeting of the members of the Roumanian refiners' cartel took place recently at the offices of the Steaua Romana, and as a result of the exchange of views, an agreement for the renewal of the cartel may be expected to be arrived at shortly.

Novorossisk Shipments.—The shipments of petroleum products from Novorossisk during January were:—To foreign ports, 486,495 poods of kerosene and 199,276 poods of benzine—in all, 685,771 poods; to Russian ports, 223,020 poods kerosene, 109,595 poods residuals, and 254 poods benzine—in all, 332,869 poods.

St. Petersburg Trade.—According to a report from St. Petersburg, dated the 1st April, the demand for kerosene was small, and the price remained at 1·51–1·52 roubles per pood in bulk ex tank. The trade in lubricating and other oils is also quiet, and prices are:—Machine oil and spindle oil, 2·15-2·20 roubles per pood; cylinder oil, 2·50 to 5 roubles; Baku benzine, 4 to 4·50 roubles. A special grade of Baku benzine is about to be put on the market, and is to replace Grosny benzine, which has lately gone up in price.

Water Flush Drilling Regulations.—The Russian Minister of Commerce has issued a decree regulating the use of water flush drilling in the Caucasian oil fields. For the exploration and exploitation of localites, the petroliferous nature of which has not been sufficiently proved, water flush drilling may be carried on without any restrictions. In localities which have clearly proved petroliferous, water flush drilling may be used only after the District Government Mining Engineer, with the assistance of the local Technical Committee, has satisfied himself that such proceedings cannot damage the oil deposits.

Baku Production.—The production of crude oil at the Baku oil fields during the first half of March amounted to 18,645,717 poods.

Production on Baku Government Plots.—The quantities of crude oil produced at Baku on Government plots paying royalties per pood in 1907 amounted to 196,132,013 poods, or 44 per cent. of the total production.

One Result of the Strikes.—Owing to a fresh outbreak of a strike and the impossible nature of the demands made by the workmen, Messrs. Miloff and Tairoff have decided to shut down their petroleum producing property at the Baku oil fields.

The Coming Congress.—The Roumanian Government has made a grant of 150,000 francs towards the expenses of the Petroleum Congress to be held in Bucarest in the coming autumn, and 50,000 francs for the purpose of researches connected with the petroleum industry.

Novorossisk Deliveries.—The deliveries of petroleum products at Novorossisk during January were as follows:—From Baku—98,517 poods of kerosene; from Grosny—208,023 poods kerosene; 463,674 poods crude oil; 234,328 poods benzine; and 7,694 poods ligroin: total, 1,012,236 poods, against 1,382,236 poods in January, 1906.

Roumania's Exports.—The exports of petroleum products from Roumania during February amounted to 24,951 tons, against 14,350 tons in February, 1907. The exports of various products were:—Crude, distillate and gas oil, 1,836 tons; illuminating oil, 13,209 tons; and benzine, 9,916 tons. The largest quantities were exported to the following countries:—France, 8,690 tons; Germany, 8,348 tons; India, 5,433 tons; Austria-Hungary, 1,317 tons; and Turkey, 1,153 tons.

The Russian Fuel Crisis.—The owners of mining and metallurgical enterprises in Central Russia, assembled in conference, have addressed a petition to M. Stolypin, the Russian Prime Minister, asking him to take steps to enable them to get their fuel supplies by facilitating the transport of coal from the Donetz, and by bringing about a termination of the strikes at the Baku oil fields. Failing this, they may be compelled to close their works, throwing out of employment hundreds of thousands of workmen.

An Echo of the Roumanian Disorders.—The production of the Roumanian oil fields in March will shew the effects of the withdrawal from the oil fields of part of the men employed there by the calling out of the army reserves. The deliveries of oils from the refineries have also been affected by the fact that the railways had to make strenuous efforts to provide transport for troops, and the transport of goods had to be relegated to the second place. The army will have to be maintained at war strength for another three months, and the petroleum industry will have to put up with shortage of labour and transport during this period.

THE OPERATIONS OF THE BAKU REFINERIES.

STATISTICS FOR NOVEMBER, 1906 (in poods).

I.—MANUFACTURE OF ILLUMINATING OILS.

Distillation.

	Submitted to Distillation.			Products Received.				
	Crude.	Other Products.	Total.	Kerosene.	Residuals.	Other Products.	Loss.	Fuel used.
November	24,670,744	275,248	24,945,992	7,206,528	16,035,602	1,117,439	586,423	739,424

Refining.

	Submitted to Refining.			Refined Products Obtained.				Chemicals used.	
	Kerosene	Other Distillates.	Total.	Kerosene.	Other Products.	Total.	Loss in Refining.	Acid.	Soda.
November	7,116,388	19,300	7,135,688	6,915,361	17,344	6,932,705	202,983	31,494	12,226

II.—MANUFACTURE OF LUBRICATING OILS.

Distillates Received.

	Machine Oil.	Spindle Oil.	Cylinder Oil.	Goudron.	Solar Distillates.	Residuals.	Other Distillates.	Loss in Distilling.	Fuel used.
November ..	1,161,164	156,092	43,032	1,266,024	683,421	307,850	79,478	964,197	558,820

Refined Products Received.

	Spindle Oil.	Machine Oil.	Cylinder Oil.	Loss in Refining.	Chemicals used.	
					Acid.	Soda.
November	182,872	940,331	19,498	138,294	32,840	3,880

The output of benzine distillates amounted to 63,358 poods. The output of refined benzine was 4,420 poods.

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Hon. Mem. Am. Phil. Soc.; Hon. Mem. Imp. Russ. Tech. Soc.; Adviser on Petroleum to the Admiralty and Home Office; Consulting Adviser to the Corporation of London under the Petroleum Acts; Adviser on Petroleum Transport to the Thames Conservancy.

Contents.—Section I.: Historical Account of the Industry.—Section II.: Geological and Geographical Distribution of Petroleum and Natural Gas.—Section III.: Chemical and Physical Properties.—Section IV.: Origin.—Section V.: The Production of Petroleum, Natural Gas and Ozokerite.—Section VI.: Refining.—Section VII.: The Shale Oil and Allied Industries.—Section VIII.: Transport, Storage and Distribution.—Section IX.: The Testing of Crude Petroleum, Petroleum and Shale Oil Products, Ozokerite and Asphalt.—Section X.: Uses of Petroleum and its Products.—Section XI.: Statutory, Municipal and other Regulations relating to the Testing, Storage and Transport.—Appendices.—Bibliography.—Index.

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Saturday, April 13th, 1907.

THE THIRD INTERNATIONAL PETROLEUM CONGRESS.

It almost seems incredible that we are within five brief months of the holding of the third International Petroleum Congress which is to take place early in August at Bucarest—so swift is the passage of time. A few days ago, while spending a brief sojourn in Roumania, I had the pleasure of chatting with two of the gentlemen who are taking such a prominent position and displaying such an active interest in connection with the arrangements for the coming Congress, and I am able to inform my readers throughout the world that no past petroleum Congress ever gave forth such a hope of being so successful. The interest already displayed in the event in all parts of that country is of no unmistakable character, and the fact that the Government, in order to encourage by all means in its power the Roumanian petroleum industry, has given a substantial subsidy, says a great deal for the international importance which this third Congress will assume, and the success which it is bound to achieve.

Personally, it is a source of deep gratification to note the consistent progress which has been made during the past few years in the endeavour to unite, as it were, the various branches of the petroleum industry throughout the world, for as far back as 1899 in the Petroleum Review I urged the necessity which existed for the establishing of a closer bond of friendship between those interested in the petroleum industry of one country and those of another. With this end in view, I initiated a scheme for the representation of the petroleum industry at the Paris Exhibition upon a scale which would be worthy of the oil trade, and though the limited time at the disposal of the colleagues who assisted me was such that the original idea had to be modified, the First International Petroleum Congress was an event worthy of the occasion, and a fruitful source of recompense for the time and expense which it had necessitated. No matter in what branch of commerce it be, pioneers invariably find an almost insurmountable difficulty in achieving the ends they have in view. There is always that feeling of lethargy to be overcome and roused into energy, and this, combined with the petty jealousy which is deep-rooted even in many leading commercial gentlemen, makes the path of the pioneer doubly hard to tread.

But I am happy to say that my friends throughout the industry rose to the occasion and saw the possibilities and the unlimited good which International Conferences were capable of yielding, for during the August of 1900 at Paris the first Congress was held, when delegates from almost every producing country attended, and in the majority of cases contributed papers of such a practical nature that they may be classed as being among the most valuable contributions to technological literature.

Without a doubt, the holding of the Exposition at Paris during the run of the Congress greatly assisted it to success, while the Liége Exposition in 1905 also must have acted as a great inducement to many gentlemen interested in the industry to take some part in the second Congress.

From the first two International assemblies, however, the coming Congress will differ, inasmuch as it will have no gigantic exhibition at its back to give an added interest to it. It will be the first petroleum Congress held under the direct patronage of any Government, and the first to take place in a country famous for its petroleum producing capabilities. The Roumanian Government, I am informed, is leaving no stone unturned that will assist to ensure the success of the third Petroleum Congress, and the fact that it has already invited the leading scientists of the world to take part in the deliberations, suggests that the work of organisation is not to be done by halves. Even now, I find that from the countries in the farthest parts of the earth, delegates representing almost ever branch of the petroleum industry have been asked to attend the Congress, and it is a foregone conclusion that much real work, which aims at the future welfare of our special branch of commerce, will be accomplished, and a great impetus given to it. Mr. C. Alimanestiano, Dr. L. Edeleano and Prof. Mrazec are the gentlemen who are devoting considerable time to the perfecting of arrangements, and for the reason alone that they are prominently interesting themselves, the very best experts in every branch of the industry in Roumania will be secured, and add weight to the deliberations of the Congress. It is not for me at the present time to divulge the many surprises which will be in store for the delegates, but if I would mention but one, it is the trip to the oil fields which has been arranged, and which in itself should be a great incentive to secure the attendance of many of my friends in England.

At the present time various local committees are being formed at many centres throughout the two hemispheres in order that interest may be aroused and sustained until the time of the Congress. The question which naturally appeals to me with full force is what we in England are to do in order that the petroleum trade of this company may be thoroughly represented. It is, of course, an old tale to learn that inasmuch as England is not a petroleum-producing country, the interest which can be taken in petroleum congresses is quite of secondary importance. As I have pointed out over and over again, this idea is entirely erroneous. Commercially, we are wrapt up in the petroleum industry as much as any country or empire under the sun. For instance, over three-fourths of the oil tank steamers which are to-day found upon almost every sea are of British build, and the majority of these fly the British flag: England is one of the largest petroleum consuming countries whose public storage accommodation stands but second to that of Russia, while it is in this country, too, that the vast majority of the tin plates used in the petroleum case oil factories are made. If space permitted, I could enumerate many other reasons which would shew how great an interest England has in the petroleum industry of the world, in which I may mention the nation has invested little short of £25,000,000 sterling. Therefore, it is of the greatest importance that England should not only take an intelligent interest in the coming Congress, but its delegates should not be limited to a few.

But the initiative must be taken before popular interest is aroused, and so I would urge my readers to seriously consider if they could not, even at a little sacrifice, give their assistance to the coming Congress which gives so much promise. I am extremely desirous that a committee should be formed of gentlemen who are willing to take their fair share in the work of securing increased patronage for the Bucarest Congress, and with this end in view I confidently appeal to all who have an interest in the petroleum industry to co-operate with me in the work.

I trust that this appeal will not be allowed to go by default, but that many public spirited gentlemen will recognise that this is an opportunity which should not be lost, and so communicate with me on the matter as early as possible, when a meeting can be called, and various questions which are bound to be given prominence at the Congress discussed.

P. Dvorkovitz.

THE PETROLEUM FIELDS OF ITALY.

The occurrences of petroleum on the Italian Peninsula, says *Petroleum*, have been known from times immemorial, and oil for illuminating purposes has been for over two thousand years obtained in localities near the ancient Agrigentum and the modern Girgenti. In the fourteenth century the production formed the subject of a concession at Miano di Medesano. In 1640, one Ariosto of Ferrara discovered an excellent oil in the locality of Monte Festino, about 12 miles from Morena. This oil was drawn from a depth of 40 to 60 feet, and was very clear. Of still better quality was the oil found at Monte Chiaro, near Piacenza. It was in the eighteenth century that the discovery was made of the now so important oil field of Montechino, to the south of Piacenza and south of Fiorenzuola, to which later were added the oil deposits at Salsomaggiore, Ozano, Neviano and Amiano, situated to the east of it.

A glance at the map shews that in Italy we have now to deal with three large petroliferous districts:—(1) The Emilia field in Lombardy; (2) The Pescara valley in Central Italy, more particularly the province of Chieta and the Liris valley, between Rome and Naples; and (3) in Sicily. Of these, only the first-named is of importance as a producer.

View of Derricks in Velleia.

In the sixties for the first time an Italian company commenced systematic trial borings in Lombardy, and at a depth of 50 metres obtained a daily output of one-half barrel. Toward the end of the seventies a French company came on the scene which at a comparatively slight depth obtained an excellent oil. By the middle of the eighties the petroleum industry in the district had assumed certain proportions and a refinery was erected at Borgo San Donnino, which treated the crude oil from Salsomaggiore, Velleia and Montechino.

Toward the end of the eighties about 600 tons of crude oil were treated at the refinery, while other refineries were also established at Fiorenzuola and Milan. During the next few years, the Italian petroleum industry made further progress. The boreholes were drilled to a greater depth and the production increased accordingly, the Canadian boring system being adapted in Italy with great success.

The production of crude oil in Italy from 1897 to 1905 was as under:—

	Quantity in Tons.	Value in Lires.
1897	1,932	492,288
1898	2,015	589,129
1899	2,242	594,062
1900	1,643	491,769
1901	2,246	671,065
1902	2,633	778,163
1903	2,486	737,293
1904	3,543	1,053,293
1905	4,768	—

The largest part of this production was obtained in the province of Piacenza, at the Velleia and Montechino oil fields.

In the eighties, exploration for petroleum in Montechino was commenced by a German company, which eventually transferred its business to a French company, the Petroles de Montechino, formed by Mr. Marchand, of Dunkirk, in 1903, with a capital of 1,200,000 francs. During that year the company produced about 800 tons of oil, and had even the good fortune of striking spouters. The area of the company's petroliferous concessions is 4,700 hectores. Of the 28 wells drilled by them, not one has yet proved a failure. In 1904, the output amounted to 1,650 tons, and in 1905 about 2,000 tons. The boreholes range in depth from 100 to 500 metres. So far, only one-ninth part of the concession has been explored for petroleum.

Another large French petroleum company, the Société Francaise des Petroles et Forages Artesiens, exploits the oil fields at Velleia. This company has a capital of 1,300,000 lires, and in 1905 produced about 1,870 tons. They possess a refinery in which they treat also the crude oil of the Montechino Co. The financial results achieved by the two companies are highly satisfactory, they having in 1905 distributed together in dividends a sum of 925,000 lires, representing 40 per cent. on their capital. The Montechino Co. by itself paid a 50 per cent. dividend, after writing off 1,000,000 lires for depreciation, etc. In the first half of 1906 the production has exceeded 3,000 tons.

The industrial activity which manifested itself in Italy in 1906 has also extended to the petroleum industry, and a company was formed in Genoa under the title of Petrolü d'Italia with a capital of 15,000,000 lires, which took over the properties of the two companies. Apart from the French, there is also Italian and Swiss capital participating in this enterprise. The new company took over 95 wells, the majority already exhausted. The 25 boreholes still productive at the end of 1905 yielded together a little over 13,000 tons, whilst for 1906 the output is estimated at about 20,000 tons. The company takes over concessions of an aggregate area of 11,000 acres, said to be petroliferous throughout. In the middle of 1906 the boreholes at Velleia were between 250 and 300 metres deep, some of the wells were later brought down to 700 metres. Two wells are now in drilling which it is intended to sink to 1,000 metres depth. The method of drilling is the same as is used at Potok in Galicia. The drilling is attended with considerable difficulty owing to frequent cavings in, so that not 25 cm of borehole can be left with casing. The strata are very much broken up, so that the sites for drilling cannot be selected according to geological indication. This makes still more remarkable the fact that the boreholes have so far been almost invariably successful.

The chemical and physical properties of the crude oil of Velleia are: - Colour, light brown; odour, pleasant; specific gravity at 17½° C., 0·787; boiling point, 82° C. up to 100° C., 2 per cent. distill over; up to 150° C., 53 per cent.; 200° C., 78 per cent.; 250° C., 89 per cent. and 290° C., 95 per cent.; sulphur, 0·1 per cent.; paraffin scale, 0·12 per cent.; colorific value, 10·436. The Montechino crude is practically of the same quality as Velleia oil. Generally, it may be considered that Italian crude is an excellent material for the manufacture of benzine and illuminating oil, but is unsuitable for the manufacture of lubricating oils.

◆

Tankage in the Illinois Fields.—The Ohio Oil Co. has now close upon 100 storage tanks in the Illinois fields, many of them being filled with Illinois crude awaiting shipment. The company has purchased an additional 160 acres of land for storage facilities, and work on the new tanks is being pushed forward as rapidly as material can be got on the ground. It is estimated that the runs from the wells in the field will soon show 60,000 barrels per day.

THE TIN PLATE MARKET.

Messrs. Norton, Owen & Co., of 4, Bishopsgate Street Within, London, E.C., telegraphing from the Quarterly Meeting of the Iron, Steel and Tin Plate trades, held at Birmingham, 11th inst., report: —

Market steady and prices unchanged as at foot. We give below particulars of shipments of tin plates for the month of March and for the first three months of the year, which, it will be seen, have been highly satisfactory.

IC	18¾×14	124 sheets	110 lbs.	15/3 to 15/4½ per box.
IC	19¼×14	120 ,,	110 ,,	15/3 ,, 15/4½ ,,
IC	20 ×10	225 ,,	156 ,,	21/4 ,, 21/6 ,,

F.o.b. Welsh ports, according to position of works. Tin lining and iron hooping extra.

SHIPMENTS OF TIN PLATES.

	Month ended 31st March.			Three Months ended 31st March.		
	1905. Tons.	1906. Tons.	1907. Tons.	1905. Tons.	1906. Tons.	1907. Tons.
Russia ..	28	3	585	4,773	219	2,141
Germany ..	2,451	2,270	3,435	6,570	7,922	10,417
Netherlands ..	2,592	3,219	·1,541	6,525	8,723	7,193
Belgium ..	619	1,236	769	1,923	3,321	2,052
France ..	1,509	2,217	2,114	3,075	5,543	6,573
Portugal ..	678	1,326	353	2,030	2,593	1,872
U.S.A. ..	6,285	3,613	4,727	19,118	10,873	16,019
B.E.Indies .	4,942	7,209	6,146	10,866	15,954	15,140
Australia ..	1,376	247	1,640	3,244	4,481	4,260
Canada ..	782	1,222	884	3,793	2,626	4,688
Other Countries	15,513	7,665	10,746	33,742	29,516	30,977
Total Tons ..	36,775	30,227	32,940	95,659	91,771	101,332
Total Values	£480,078	£401,713	£473,796	£1,236,806	£1,203,882	£1,432,382

◆

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A Record.—The torpedo destroyer "Cossack," which was recently launched by the British Admiralty, is expected to attain a speed of 33 knots per hour. She will be the fastest vessel ever floated. She will run on oil fuel.

CLASSIFIED IMPORTS INTO UNITED KINGDOM UP TO APRIL 8th, 1907

IN GALLONS.

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Country.	Illuminating.		Lubricating.		Residuals.		Gas Oil. (Solar)		Benzine.		Fuel Oil.		Other Descriptions.		Totals.	
	Since Mar. 23.	From Jan. 1.	Since Mar. 23.	From Jan. 1.	Since Mar. 23.	From Jan 1.	Since Mar. 23.	From Jan 1.	Since Mar. 23.	From Jan. 1.	Since Mar. 23.	From Jan. 1.	Since Mar. 23.	From Jan. 1.	Since Mar. 23.	From Jan. 1.
Austria ...	—	—	—	61,640	9,960	49,960	—	—	—	—	—	—	—	—	9,960	111,600
Belgium ...	—	153,410	20,090	152,510	—	—	—	—	—	—	—	—	—	590	20,090	306,510
Canada ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dutch India.	—	—	—	—	—	—	—	—	713,000	5,253,830	—	—	—	—	713,000	5,253,830
Germany ...	21,980	1,107,070	16,980	383,110	—	2,000	—	—	80	80	—	—	—	2,200	39,040	1,494,460
Holland ...	440	920	—	3,440	—	—	—	—	—	123,680	—	—	3,360	42,160	3,800	170,200
Roumania ...	—	1,102,830	—	—	—	—	—	1,065,900	867,550	1,459,000	112,000	238,700	—	—	979,550	3,886,430
Russia ...	543,000	6,157,880	3,150	1,494,550	—	—	—	—	—	600	—	—	—	—	546,150	7,653,030
U.S.A. ...	2,803,210	26,290,990	1,765,860	10,898,990	12,680	434,690	2,595,360	15,512,820	949,670	1,375 780	—	1,332,000	15,120	474,960	8,141,900	56,320,230
Other Countries	—	260	—	15,410	—	—	—	—	—	2,500	—	40	600	840	600	19,050
	3,368,630	34,813.360	1,806,080	13,009,650	22 640	486,650	2,595,360	16,578,720	2,530,300	8,215,470	112,000	1,570,740	19,080	520,750	10,454,090	75,195,340

PETROLEUM IMPORTS INTO THE UNITED KINGDOM DURING MARCH.

THE SHIPMENTS INTO VARIOUS PORTS.

In the following table we give the various shipments of petroleum products into the ports of the United Kingdom during March. The total quantities imported amounted to 17,002,320 gallons, as compared with 22,200,000 gallons in February and 28,000,000 gallons in January. The position of the English tank fleet has, of course, to a very great extent accounted for the diminution during March, but, apart from this fact, a slight decrease is noticed when the totals for the first three months of this year are compared with those for January-March, 1905. The total deficit is about 5,000,000 gallons. The imports of lubricating oil account for one-half of the decrease, but, on the other hand, illuminating oil imports have somewhat increased. The month's figures (in gallons) are :—

	Lubricating.	Illuminating.	Residuals.	Benzine.	Other Products	Fuel.	Gas.
Belfast	140	429,600	—	—	—	—	—
Bristol..	108,880	420,800	—	—	2,400	—	—
Dundee	400	—	—	—	400	—	—
Goole	—	—	—	80	—	—	—
Glasgow	371,150	—	—	—	20,750	—	—
Grangemouth	7,010	9,200	—	—	—	—	—
Grimsby	390	—	—	—	—	—	—
Hull	298,600	—	—	—	11,020	—	—
Lerwick	—	260	—	—	—	—	—
Leith	56,960	41,940	—	—	—	—	—
Liverpool	971,210	811,250	18,550	36,000	6,360	—	506,200
London	645,040	2,846,850	9,960	713,000	42,160	1,332,000	1,849,510
Manchester	1,058,330	2,915,410	—	—	9,410	—	908,970
Middlesboro'	2,920	—	—	—	—	—	—
Newcastle	129,140	—	—	—	—	—	—
Newport	6,000	—	—	—	—	—	—
Plymouth	—	—	400,670	—	—	—	—
Swansea	3,400	—	—	—	—	—	—
Totals	3,659,570	7,475,310	429,180	749,080	92,500	1,332,000	3,264,680

DETAILS OF BAKU PRODUCTION AND BORING DURING DECEMBER, 1906.

The following are the details of the production of crude oil at the Baku oil fields during December as published in the latest issue of the *Neftiannoie Dielo* :—

	Number of Wells in Exploitation.	Production (in poods).				Average per Well per Day.
		By Baling.	By Spouters.	Casual.	Total.	
Balakhany	666	6,424,794	—	3 039	6,427,833	326
Saboontchi	611	15,340,221	526,500	309,459	16,176,180	886
Ramany	201	9,320,774	1,414,000	48,332	10,783,106	1,798
Bebe-Aibat	208	12,767,093	—	—	12,767,093	2,108
Total in December, 1906	1,685	43,852,882	1,940,500	360,830	46,154,212	920
Total in November, 1906	1,620	41,014,417	927,000	381,200	42,322,617	902
Total in December, 1905	868	18,952,088	803,000	194,491	19,949,579	969

In addition to the above, there were produced at Binagadi from 12 boreholes 22,853 poods.

The production by spouting was obtained from the following wells :—

			Poods.
At Sabooutchi	Rossia Co.	Well No. 4, on plot No. 159	526,500
,, Ramany	Nobel Bros.	,, No. 400, ,, No. 140	1,074,000
,, ,, ...	Pitoeff and Co...	,, No. 1, ,, No. 76	340,000

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DEVELOPMENTS IN THE KENTUCKY FIELDS.

The latest issue of the *Oil, Paint and Drug Reporter* states that a pipe line extension has recently been completed to the new Clinton county oil fields, in South-eastern Kentucky, and a large quantity of oil is now being shipped from that division. This is the first new division to be added to the new producing area for over a year.

A pool of some consequence has been developed in Clinton county. The New Domain Oil and Gas Co. has been testing for two or three years, and now has a number of producing wells. During the past two months a few smaller concerns have been drilling, and probably a dozen good wells have been brought in.

Advancing prices are reviving interest in a number of smaller divisions of the State, although it will take a considerable advance to greatly increase present production. Some drilling has recently been attempted in Cumberland, Floyd, Knott and Whitley counties. In Cumberland county, once the centre of development in Kentucky, several companies are endeavouring to establish a deep oil-bearing formation. Some success has resulted from tests, one deep well shewing 50 barrels production daily. In Floyd and Knott counties the Beaver Creek's development has begun to command attention. Two new rigs have been planted there. In Knox, Estill, Bath and Rowan counties, Kentucky, no drills have yet been put to work, although new work is promised for all these fields.

BATOUM PETROLEUM SHIPMENTS.

The following were the shipments of petroleum products from Batoum during the week ended March 17th, o.s. (in poods):—

	Illuminating Oil.		Other Products.	
	1906.	1907.	1906.	1907.
To Europe ..	558,000	594,000	4,000	1,000
To the East ..	—	216,000	—	5,000
To Russian Ports	1,000	—	12,000	—
From 1st Jan. to Mar. 17th:—				
To Europe ..	2,202,000	3,488,000	735,000	2,046,000
To the East ..	637,000	2,453,000	—	12,000
To Russian Ports	874,000	355,000	43,000	22,000

THE IMPORTATION OF PETROLEUM INTO SIERRA LEONE.

A recent copy of the *Sierra Leone Royal Gazette* contains a copy of a Bill to amend the law relating to the importation and keeping of petroleum in the said Colony.

The Bill, which it is stated is published for general information, provides that notwithstanding the provisions of the Petroleum Ordinance, No. 1 of 1906, the Govenor-in-Council may authorise the importation and keeping of petroleum, which gives off an inflamable vapour at a temperature of below 95° F.—provided an application in writing is made to the Collector of Customs for such purpose. It is also provided that no permit will be granted to import or keep petroleum which is capable of being used as an illuminant.

The Governor may remit any duties that may have been paid in respect of petroleum imported under the Principal Ordinance of 1906—provided such petroleum has been imported for industrial or manufacturing purposes only.

PRODUCTION OF ENGLISH COMPANIES IN RUSSIA.

Baku Russian Petroleum Co., Ltd.—The production for the week ended 30th March was 257,000 poods, or 4,143 tons; and for the week ended 6th April was 197,000 poods, or 3,176 tons. This company's wells were stopped from 29th March to 3rd April by a strike of workmen.

Russian Petroleum and Liquid Fuel Co., Ltd.—The production for the week ended 31st March was 188,000 poods, or 3,031 tons; and for the week ended 7th April was 195,000 poods, or 3,144 tons.

Spies Petroleum Co., Ltd.—The output for the week ended 31st March was 136,710 poods, or 2,205 tons; and for the week ended 7th April, 138,005 poods, or 2,225 tons.

The European Petroleum Co., Ltd.—The production for the week ended 31st March was 134,830 poods, or 2,174 tons; and for the week ended 7th April was 136,125 poods, or 2,195 tons.

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THE PETROLEUM REFINING INDUSTRY OF THE UNITED STATES.

SUBSTANTIAL EXPANSION.

(Concluded from page 190.)

After the oil has stood (as described in the last issue of the Review) and separated into layers of oil and spent acid, the latter is drawn off and the oil washed by agitation with water. It is then treated with an alkaline solution, by means of which not only any free sulphuric acid, but also any acid salts or other bodies present may be neutralised. After the alkaline solution has settled and been drawn off the oil is washed until all traces of alkali are eliminated, and then it is drawn off to settling or sunning tanks. In special cases it may now be again distilled to fraction it more completely, or it may be treated in a steam still to reduce it.

The quantity of sulphuric acid required in refining petroleum and the length of exposure to its action depends on the original purity of the distillate and the purity sought. Cracked oils require more acid than uncracked, and the Ohio oils require more than the Pennsylvania. Usually the amount of acid required increases with the density of the distillate. It is, as a rule, added in repeated doses, until the desired result is obtained. The acid sludge is sometimes treated so as to regain the sulphuric acid for reuse; at other times it is used in the manufacture of fertilizers and for other purposes in chemical manufacture.

In 1905, 165,104 short tons of sludge acid, having a value of $400,480, or $2·43 per ton, were reported as having been sold from the refineries. The weight of sludge acid thus accounted for formed 78·1 per cent. of the total sulphuric acid used in refining in that year. In 1890 there were reported 33,911 tons of sludge acid used for fertilisers and chemicals, and 19,962 tons for recovered sulphuric acid, the total, 53,873 tons, constituting 56·1 per cent. of the total sulphuric acid reported as used in refining petroleum at that census. In 1880, there were reported 22,163 tons of sludge acid used for fertilisers, and 21,159 tons for recovered sulphuric acid, the total, 43,322 tons, constituting 94·5 per cent. of the total sulphuric acid reported as used in refining petroleum at that census. The alkali sludge has sometimes been heated to destroy the organic matter present and recover the alkali, but this is usually found unprofitable.

When sulphur is present in petroleum it is difficult of removal, so that special treatment must be given oils, such as Lima oil, which are high in sulphur contents. Some refiners effect this by distilling the petroleum over scrap iron and treating the distillate first with an alkaline solution of lead oxide, and then with flowers of sulphur to remove the last traces of lead. Much the greater part, however, is distilled over copper oxide, the oxide being regained by burning off the sulphur.

According to Mabery, "Probably 50 tons of sulphur daily is a conservative estimate of the amount extracted from Ohio oil and burned off into the atmosphere. It is claimed for this process that it is capable of removing the sulphur to two one-hundredths of 1 per cent., which is probably correct." In addition to the chemicals mentioned, others are sometimes used, among which are chromic acid, or bichromate of potash and sulphuric acid, employed to oxidise the acrid and objectionable components; nitronaphthalene, added to the oil prepared for sale to make the phenomenon of fluorescence, or to debloom the oil; and many others mentioned in the patents on petroleum refining.

The classification of petroleum products is a matter of difficulty because the same name has at various times been given to different substances, some of which are not products of petroleum, and because the same material has been known by different names. The various products may, to some degree, be differentiated by their boiling points, specific gravities and fire tests. Yet again there is confusion from the use for liquids lighter than water, of the Beaum hydrometer, which has a purely arbitrary scale, with which to gauge the densities of the oils, instead of one which would measure their real specific gravities directly, so that a 60° oil on the Beaum scale is one whose real specific gravity is 0·745, while a 48° B. oil is one whose real specific gravity is 0·794; in other words, the higher the number on the Beaum scale, the lower is the real specific gravity and the lighter the oil. Likewise, the fire test, or test of the behaviour of the oil on exposure to a naked flame or source of ignition, covers both the flashing-point test, for determining the lowest temperature at which the oil gives off vapours which form combustible and explosive mixtures with air, and the burning-point test, for determining the lowest temperature at which the body of oil will take fire and continue to burn. It is greatly to be regretted that this confusion exists in the literature on the subject, and particularly in the statute books, as the flashing-point test is the one by which the community is protected from accidental explosions and fires in the handling and use of illuminating oils.

With this introductory explanation, it may be stated that the term "naphtha and gasolene" embraces pentane, boiling point 100·4° F., real specific gravity 0·625, which is used as a standard of light in photometric work; petroleum ether, boiling point 104° F. to 158° F., specific gravity 0·65 to 0.66 or 85° to 80° B., which is sometimes known as Sherwood oil; 76° gasolene, boiling point 158° F. to 194° F., specific gravity 0·66 to 0·69 or 80° to 75° B., known also as 680 spirit, motor spirit, petrol carburine and boulevard gas fluid and used in naphtha lamps and internal combustion engines, in the extraction of oil from seeds and fat from garbage and wool, and in carburetting water gas; naphtha, boiling point 177° F. to 230° F., specific gravity 0·69 to 0·70 or 76° to 70° B., known also as Danforth's oil, ordinary spirit (when in condition of untreated distillate), deodorised spirit (when purified), and city naphtha, and used as petrol in motor cars, for burning in vapour stoves and street lamps, as a solvent for resins in making varnishes, and in the manufacture of oil-cloths; stove naphtha, specific gravity 0·70 or 70·4° B.; ligroin, boiling point 176° F. to 248° F., specific gravity 0·71 to 0·73 or 67° to 62° B., used as a solvent in the chemical laboratory and in pharmacy and for burning in sponge lamps; benzine (deodorised), boiling point 248° F. to 302° F., specific gravity 0·73 to 0·75 or 65° to 57° B., used as a substitute for turpentine for cleaning printers' type, and for dyers', scourers' and painters' uses. In the refinery all of the above-mentioned fractions may be included in the substances known as "naphtha," specific gravity 0·74 or 64° to 60° B.; B-naphtha, specific gravity 0·72 or 68° to 64° B.; and C-naphtha, specific gravity 0·70 or 80° to 68° B. All petroleum distillates having a specific gravity above 60° B. may be styled "naphtha and gasolene." Although engine distillates which are a cut between "naphtha and gasolene" and kerosene may be classed with the former, the lightest engine distillates, which run well up in the sixties in gravity, are prepared for small engines, while the heaviest are intended to replace kerosene in kerosene engines. As a rule they are not as carefully purified as gasolines and kerosenes of the same gravity, and differ, in the lower members, from kerosene in that no attention is paid to the flashing point.

The distillate collected between 60° B. and 40° B., or specific gravity 0·744 to 0·829, is crude illuminating oil. The refined illuminating oils are known by a large number of names, the most common general name being kerosene. The oils are graded by the colour, their flashing-point tests, their burning-point tests, and their specific gravities. Water white oil of 120° F. flashing-point test, 150° F. burning-point test, and 48°·B. gravity is standard, but there are many other gravities of water white oil. The Quartermaster's Department of the Army has specified 130° F. flashing-point as the minimum for oil supplied to that department. Other grades, by colour, are prime white, having a faint yellow colour, and standard white, having a pronounced yellow colour. Water white oil of gravity 45·5° B. and 175° F. burning point is frequently sold as headlight oil for use in locomotives. Water white oil of 36° to 38° B. and 300° F. burning point is known as mineral sperm oil, mineral seal oil, mineral colza oil, coach oil and 300° oil, and is used as an illuminant in railway coaches and lighthouses and for other purposes where readily ignitable oils are objectionable. Such an oil produced from wax oil, when pressed, and not lighter than 34° B., is used in Pennsylvania in compounding miners' lamp oil. An oil having a specific gravity of from 0·85 to 0·86 and a flashing point above 100° F. is known as gas oil. Stove oil is generally a cut from the crude still following the kerosene.

The lubricating oils vary so greatly as to be beyond description within reasonable limits. The highest of the lubricating oils, varying in gravity from 32° to 38° B., are known as neutral oils, or when further purified by filtration through boneblack or Fuller's earth, as they usually are, as neutral filtered oils. Heavier lubricating oils are styled "spindle oil" and "cylinder oil." The most important characteristics which distinguish these oils are high burning point and viscosity, and low cold test. Cylinder oils are obtained by distilling the heavy oils, from which the naphthas and illuminating oils have been removed, with superheated steam, taking care that no cracking takes place.

Besides the various oils, semi-solid products, represented by vaseline, and solids, such as paraffin and petroleum coke, are obtained in petroleum refining. Vaseline is obtained by filtering heavy cylinder stock through boneblack filters until the required colour is obtained; the first runnings from the filters, which are sufficiently light in colour, may be used for vaseline, and the darker part used as filtered cylinder stock. To secure the necessary consistency and melting point, pure paraffin is melted and added to the filtered material. Rod wax obtained from the tubes and rods of pumping wells and the salvy residues from oil tanks and pipe lines, which is known in the industry as B.S., are employed in the manufacture of these semi-solid petroleum products. They are used directly as ointments or employed with drugs in the manufacture of ointments and salves, and are styled in the United States Pharmacopœia petroleum molle, or soft petroleum, the requirement being that they have a melting point of from 104° to 113° F.

If the rod wax be pressed, it yields a solid with a low melting point and a salvy half-paraffin nature, which, either directly or when mixed with chicle or balata gum, is used as chewing gum. Paraffin, obtained from the chilling and pressing of the wax-bearing distillates, preferably distilled at high temperatures to ensure crystallisation, is generally manufactured in three varieties, with melting points of 125° F., 128° F., and 135° F., known as C. B. and A. paraffin respectively. The petrolatum spissum, or hard petrolatum, of the United States Pharmacopœia should have a melting point of from 113° to 125° F. The petroleum paraffin stands next in order of petroleum products as classified by the melting points. The paraffin is purified by a chemical treatment like that for the other distillates, by filtration to remove colour, by recrystallisation from solution in benzine, and by sweating. This last is done by chilling it in cakes in shallow trays having wire-mesh bottoms. These are stacked in rooms, which are gradually heated. The paraffin, having the lowest melting point, becomes liquid, drips out, and is collected; with another increase in temperature and change of receivers the paraffin of the next higher melting point is obtained, and the operation is thus continued until the desired degree of separation is effected.

Paraffin is used for many purposes in the arts. The harder varieties are used largely in the manufacture of candles, about 5 per cent. of stearic acid being added to prevent the candle from softening and bending. They are used also for finishing calicoes and woven goods and in laundry work to produce a lustre. The softer varieties are used for coating jellies and fruits in preserving jars, for the preparation of translucent and waterproof paper, for waterproofing cloth, for mixing with stearic acid and wax in candle making, for impregnating the wood of Swedish matches, and as the absorbent in the process of enfleurage or extraction of the perfume from flowers,

The Petroleum Fields of Washington County.

AN EXHAUSTIVE REPORT BY THE U.S. GEOLOGICAL SURVEY.

Another of those interesting and exhaustive reports dealing with certain areas in the Pennsylvania fields has just been completed by Mr. F. C. Clapp, of the United States Geological Survey, the area embraced being known as the Amity Quadrangle, extending over territory 224 miles square. The salient points of the report are set out below. The author points out that the Amity Quadrangle, with its producing areas, embraces a large number of oil and gas wells, but the great majority are limited to certain groups or fields in which the oil and gas appear to concur in so-called pools or reservoirs of some extent. The term field as used in this report means simply a group of producing wells or wells which have produced in the past, and it is not implied that outside of the field the territory is unproductive. On the other hand, it is probable that in time other sections of the region will be found to contain more or less oil and gas. In this quadrangle the occurrence of oil is limited almost entirely to one area—the so-called Washington field. This field extends in a north-east direction from a point near Claysville, in the western part of the county, through the town of Washington and across South and North Strabane townships in the vicinity of Linden. The field includes the Morgan, Willetts, Davis, Taylor, Barre Smith, Manifold, Munce, Cameron, Thome, Wright, Linn, Rooney, Martin, Wade, Kunz, Le Moyne and other farms, which were widely known at the time of the oil excitement for their many producing wells.

On the border of Greene county, in the extreme south-west corner of the quadrangle, lies a small oil field, only partially within the area, which is generally known as the Fonner field, though sometimes as the Dunn Station field. Portions of this field are in the Waynesburg, Rogersville and Claysville Quadrangles.

Near the centre of Somerset township small quantities of oil have been produced by a number of wells, and it has been struck in a few wells in West Bethlehem and North and South Franklin townships. A short distance off the quadrangle, north-east of Linden, a new oil field is now being developed.

The earliest known drilling for oil or gas in Washington county was by the Washington County Eureka Oil Co., organised in 1861. A shallow well was sunk on the Mannon farm, at West Amity station, on the Waynesburg and Washington Railroad. This well was drilled to a depth of 900 feet and abandoned. About the same time several wells were drilled by other companies at Prosperity, Lone Pine, and in South Strabane township, but all the workings were abandoned. The Morgan Oil Co. came into the region in 1880, and drilled its first wells on the Alexander McGuigan farm, in South Strabane township.

In 1884 the first important development of the Washington field began. Late in that year the Citizens' Natural Gas Co. was organised and commenced a well on the Gantz mill property, opposite the Chestnut Street Station of the Pennsylvania lines in Washington, but, instead of striking gas, the drill penetrated sand at 2,191 feet, which produced oil. The Gantz well was the first producing well in the county, and the producing sand came therefore to be known as the Gantz sand. The Gantz well made two flows, one in January and one in February, 1885, but after this the well was only a "pumper." For some time it was closed down, but was later drilled to the Gordon sand.

Immediately on the circulation of the news that oil had been discovered at Washington great excitement arose among persons interested in oil. The town was at once invaded by a large number of oil experts and other persons, and within three months 21 wells were under way in various parts of the county. Some of these were drilled for gas. In April, 1885, a well was started by the People's Light and Heat Co. on the Gordon farm, on the edge of the Claysville Quadrangle, north of Washington, and August 22nd a sand was encountered at 2,392 feet, from which the oil gushed at a rate of 25 barrels per hour. At that time the Gordon well was the deepest producing oil well in the world, and the sand was called the Gordon sand. Later in the year this well averaged 104 barrels per day for 39 successive days.

With the news that oil had been struck in the Gordon, drilling began in earnest, and for a few years Washington was a great oil camp. Hundreds of wells were drilled in the southern, western and eastern parts of the town, and in the area extending to the north-east as far as Linden. New producers became frequent, and the excitement was intense. Nearly all the successful wells were oil wells, though the field has contained a few scattering gas wells. As usual in the rich fields, the greatest production was confined to a very few farms, some of which contained from 10 to 30 wells apiece. Most of these had a rather short life. Few wells have been drilled in this part of the field in several years. One or two have recently been drilled to the fifth sand, and produce oil from it. In the region south-west of Washington, however, development is still going on. At Meadowlands, in the valley of Chartiers Creek, a pumping station of the South-west Pennsylvania Pipe Lines is located, and in this valley, between Meadowlands and Houston, are situated about 50 tanks, with an average capacity of 29,350 barrels, in which oil of the south-west district is stored.

Oil was discovered in the Fonner field in March, 1897. The first well produced 1,800 barrels per diem for a short time, and then production declined. A number of barrels was drilled in 1898 99 to the Gantz and 50-foot sands, which yield the oil. The oil is pumped into small tanks and transported by the South-west Pennsylvania Pipe Lines to the Meadowlands storage tanks.

In the Washington fields the wells are from 2,300 to

2,900 feet deep, and this is about the average throughout the quadrangle. The deepest section is that of the Hawkins No. 1 well in the borough of Teemston. This well extends 3,611 feet below the surface, or over 3,100 feet below the lowest exposed horizon in the quadrangle.

Early in the history of oil and gas developments attempts were made to discover some means of predicting their occurrence. Since 1859 various geologists and others have published papers attempting to solve this problem. In 1885 I. C. White first formulated the anticlinal theory in which he shewed that nearly all the great gas wells and pools are situated near the crests of anticlinal folds; while wells bored in the synclines on one side or the other of the anticlines more often obtain little or no oil or gas, but in many cases large quantities of salt water.

The view is, in brief, that when the rocks are gently tilted the oil, gas and salt water contained in them are caused to separate out in the order of their densities; water (if present) in the synclines, oil next above, and gas nearest the crests of the anticlines. In Western Pennsylvania and Northern West Virginia these accumulations take the form of belts approximately parallel with the axes, in a general north-east-south-west direction. White states various apparent exceptions, but in reality modifications of the theory due to the non-parallelism of surface beds with the oil and gas rocks, etc.

Much has been written *pro* and *con* about this theory by various geologists and others, and some have seriously doubted whether it is true. By most geologists the theory is now accepted, not, however, as absolute in its limitation of the occurrence of oil and gas, but as explaining their occurrence to a considerable extent. The distribution of the pools is dependent also on the presence or absence of water in a given region or a given sand; on the continuity and shape of the anticlines, whether they are ascending or plunging in a given direction; on the porosity of the oil rock, its capacity to hold oil, the direction of its variation, etc.

The data regarding the Pennsylvania fields which have been published shew a certain degree of correspondence of distribution of these deposits to geologic structure. The gas fields occur generally on the anticlines; the oil fields part way down the slope if water is present, in the bottom of the synclines if water is absent.

To take the Pennsylvania and northern West Virginia fields as a group, the evidence at present seems to warrant the following generalisations regarding structural distribution:—

(1) When not affected by other conditions, accumulations of oil and gas shew a definite relation to the structure of the region.

(2) The greatest elongation of the pools is generally in a direction approximately parallel with the axes of the folds.

(3) Where both oil and gas occur they are distributed according to their densities, the oil in the lower and the gas in the higher portion of a stratum.

(4) When salt water is present oil may occur in that part of the stratum lying directly above the water level.

(5) Oil may occur on the crests of anticlinal folds below the water level.

(6) When salt water is absent the occurrence of oil is more irregular and more affected by other conditions; it may occur along the synclinal axes or at many points scattered over the slope.

(7) Oil may occur on a structural slope at points where the dip changes from gentle to steep.

(8) Gas occurs most commonly on the higher portions of the anticlinal arches above the upper level of the oil.

(9) Gas also occurs in widely scattered localities, owing to small local folds or changes in porosity.

Structure is not the only condition determining the occurrence of gas and oil. The structure may be favourable, yet neither oil nor gas occur. The chief condition other than those given above is the existence of rock of such character as to act as a reservoir.

A study of the Amity Quadrangle with reference to the distribution of oil shews certain relations which hold good with respect to the individual fields. The Washington oil field, the most striking example, is located on the eastern flank of the Washington anticline, which it follows in this quadrangle for a distance of five miles. The field averages about a mile in width, and in position agrees closely with the lower portion of the steepest grade of the anticlinal slope. The greater proportion of wells are grouped in a belt about a mile wide just above a change in grade from the gentle structural slopes of the bottom of the syncline to the steeper slopes of the anticline. Along this belt the dip of the rocks is unusually steep—about 200 feet in a mile. This is the steepest continuous dip in the quadrangle, and is greater than usually occurs in Pennsylvania oil fields.

One small area in the Washington field—the group of wells west of Gambles—shews structural relations somewhat different from those in the rest of the field. This area is near the north end of the Washington field, and here the belt bends to the east and oil occurs down to the bottom of the syncline. As operations in this part of the Washington field ceased long ago, it is difficult to obtain data for drawing conclusions regarding the cause of these peculiar conditions. It is suggested, however, that if the rocks directly below this pool are dry and the oil may have descended from farther up the slope, and thus the relations of the field may be accounted for. Another peculiar feature of this field is the presence of a number of gas wells in the bottom of the syncline north of Linden. Such an occurrence is exceptional, as gas is more often present on the anticlines. The gas occurs, however, above the oil, as would be expected.

The distribution of oil and gas in the quadrangle as a whole can be said to shew a fair agreement with the geological structure. The most favourable location for oil seems to be on the flanks of the anticlines, and for gas either on the broad anticlinal arches or the upper part of the synclinal slopes—always, however, higher up the slope than where oil is found.

All the oil produced in this district is a high grade of petroleum. It has a paraffin base and a high degree of purity. In colour it varies somewhat. Though generally green it is sometimes black, and in a few cases amber or even nearly transparent.

The American Oil Market.

New York, Week ended March 30th.

Developments in the principal oil fields gave but little encouragement, as most of the completions are located inside of defined territory, and give no indications for inducements toward increased operations. Reports from the Illinois oil field note that operators are preparing for activity as soon as the roads become passable. It is intimated that it will not require increased efforts to increase the production of the Illinois field to 80,000 barrels a day by June 1st. The completions recently shewed a large percentage of light pumpers. A big strike was recently discovered in Lewis county, O., says the *Oil, Paint and Drug Reporter*, and when tapped the well produced 350 barrels during the ensuing 24 hours. There has been considerable drilling in that section in the fourth sand, but none of the wells got oil. According to reports millions of dollars are seeking investment in the oil fields of the Indian Territory. All available land around the Glenn pool has been leased. Lease takers are active, and it is claimed that hundreds of these leases will never be drilled on. Outside of the above pool no development work thus far has proved very encouraging. Reports from the Mid-Continent oil fields as to runs for the first fourteen days of March are behind the average for the same time last February. Some oil is being shipped from the Glenn pool in Indian Territory by rail to points in Texas by companies building pipe lines to connect the oil fields of Kansas and Oklahoma with the sections of the Gulf coast. The following prices are for Texas and Louisiana crude oils, as credit balances as posted by pipe lines and are according to gravity:—Spindle Top, 80c.; Sour Lake, 79c.; Batson, 75c.; Saratoga, 75c.; Humble, 77c.; Jennings, 72c.; Shreveport, 72c. Beaumont oil producers are inquiring as to what becomes of the oil which goes to waste on Spindle Top.

Refined and Products.—The local market presented firmness, and the feature during the week was the announcement from Cleveland, O., on March 26th, stating that the Standard Oil Co. on that date advanced the price of all grades of gasoline, naphtha and refined oil in barrels ¼c. per gallon, f.o.b., at Cleveland. No advance in price is made on gasoline or refined oil sold from tank waggons. This was followed by an advance of 1c. per gallon in local values of naphtha and gasoline. The demand for these products has materially increased owing to the milder and more favourable weather. The export demand for refined was stimulated. In response to a good demand from the home trade further advances in prices for refined and products are looked for. The demand for refined for export was satisfactory, and trade in the local market continued good.

The price for barrelled oil for export closed unchanged, and the market is quoted at 8·20c. for New York loading, and 8·15c. for Philadelphia loading. The total engagements during the week in the local market amounted to over 212,000 barrels. The principal foreign markets closed firm. Freight rates closed firm at 2s. 2d. @ 3s. od. hence to London, and 2s. 3d. @ 3s. od. to Continental ports, as to port and vessel.

Cases for export were in good demand, and sales of over 330,000 cases were reported. The price of plain tops closed firm at 10·65c. Freight rates were firm and unchanged.

Crude for export was firm, but no sales were reported. Pennsylvania crude closed at 7·75c. in barrels.

Naphthas were firm, and sales of 1,100 barrels for export were reported.

CLOSING QUOTATIONS.

Crude.	Week ended Mar. 23. 1907.	Mar. 30. 1907.
Pennsylvania crude in bbls.	$7·65	$7·75
Pennsylvania crude in bulk	4·55	4·60
Residuum, bbls. for export	6@6½	6@6½

Crude at the Wells.

The quotations for oil represented by credit balances were ;—

	Week ended Mar. 30. 1906.	Mar. 30. 1907.
Tiona	1·68	1·78
Pennsylvania	1·58	1·78
North Lima	0·94	0·94
South Lima	0·89	0·89
Indiana	0·89	0·89
Canadian Oil:		
Petrolia	1·34	1·34

Refined—For Export.

		Week ended Mar. 30. S.W.	W.W.
Barrels, cargo	per gal.	$8·20	@10 20
Philadelphia		8·15	@10·15
Bulk, New York		4·75	@ 6·75
Bulk, Philadelphia		4·70	@ 6·60
Cases, New York		10·65	@13 65
Cases, Philadelphia		10·60	@13·60

Refined in Cases—110 Fire Test.

	Week ended Mar. 23. 1907.	Mar. 30. 1907.
3,000 to 10,000	10·40	10·80
1,000 to 3,000	10·45	10·85

Refined—Jobbing Lots.

In barrels, pkgs. included.

		Week ended Mar. 23.	Mar. 30.
120 fire test, S.W.	in barrels	12	12
130 fire test, S.W.		12½	12½
150 fire test, W.W.		13½	13½
In bulk from tanks		10	10
300 fire test		12¾@13½	13¼@14

Naphtha and Gasolene.

	Week ended Mar. 23.	Mar. 30.
Naphtha, crude, car. lots, 68 @ 72 deg.	—	—
Gasolene, 86 deg...	23 00	24·00

Pennsylvanian Oil Runs from Mar. 22nd to Mar. 28th were:—Mar. 22nd, 169,852; Mar. 23rd and 24th, 171,561; Mar. 25th, 154,413; Mar. 26th, 173,346; Mar. 27th, 177,013; Mar. 28th, 169,015. For the month of February, 2,655,130.

The Deliveries of Pennsylvania Oil for the same dates were:—159,181; 261,772; 122,228; 151,196; 129,926; 159,180. For the month of February, 4,784,869.

Charters for the Week.

The total charters for refined, crude, naphtha, etc., in bulk, barrels and cases, during the week ended March 29th and from Jan. 1st, were as follows:—

	Week.	Year.	1906.
Refined, barrels and bulk	292,908	3,572,520	2,808,700
Refined, cases	330,873	3,953,829	3,136,000
Crude, barrels and bulk	500	93,864	418,400
Crude, cases	400	27,440	93,000
Naphtha, barrels	6,027	104,395	89,000
Residuum, barrels	—	140,637	180,500
Lubricating, barrels	—	—	106,900
Total, barrels cde. eq.	487,394	7,446,842	6,007,930

Clearances for the Week.

During the week ended Mar. 29th, and since Jan. 1 the clearances of petroleum, in gallons, from the port of New York, were as follows:—

	Week.	Year.	1906.
Refined	12,507,380	113,546,490	119,676,230
Crude	—	787,430	211,600
Naphtha	135,650	1,733,430	3,684,750
Residuum	12,500	152,887	—

Export Statistics.

The total exports from the port of New York and from the United States have been:—

	Gallons.
From New York, week ended Mar. 29th	12,746,066
Total from New York, from Jan. 1st, 1907	162,574,844
Same period last year	159,786,587
Increase	2,788,257
From United States, week ended Mar. 29th	34,144,279
Total from United States, since Jan. 1, 1907	286,897,171
Same period last year	283,633,809
Increase	3,263,362

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The "Review" Shipping List.

April 12, 1907.

(*The following abbreviations are used in this table:*—L. Left; P. Passed; Arr. Arrived; Sp. Spoken; Tr. Trading.)

Vessel.	From.	For.	Latest Date and Position.
ALICE ISABELLE	Philadelphia	Sables d'Olonne	L. Mar. 24
ALCHYMIST	Havre	Salzaete	Arr. Flushing, April 7
ALEMBIC	New York	—	L. Mar. 23
AMERICAN	New York	Antwerp and Shanghai	Arr. April 6
APPALACHEE	San Francisco	Canton	At Shanghai Abt. April 8
APSCHERON	Antwerp	Batoum	P. Constant'ple, April 7
ARAL	Tyne	New York	P. Dunnet Head, Mar. 28
ARAS	Kustendje	London and Hull	L. Constant'ple, Mar. 31
ARGYLL	—	—	Coasting U.S. (Pacific)
ASTRAKHAN	Hamburg & Tyne	Philadelphia	P. Dunnet Head, April 1
ATLAS	—	—	Coasting U.S. (Pacific)
AUGUST KORFF	Philadelphia	Manchester	P. Del. Break Mar. 29
AUREOLE	Blyth	New York	Arr. April 7
AZOV	—	—	Trading on W.C. of South Amca.
BAKU STANDARD	Point de Grave	Kustendje	L. Algiers, April 3
BALAKANI	Kustendje	London	L. Constan'ple, April 2
BATOUM	Tyne	—	P. Colombo, April 8
BAYONNE	New York	Algiers	P. Tarifa, April 9
BEACON LIGHT	Port Arthur (Texas)	London	L. April 4
BEME	Coconada	Cochin	L. Mar. 10
BLOOMFIELD	Blyth	New York	P. Butt of Lewis, April 4
BORJOM	Alexandria	Batoum	Arr. Dardenelles, Mar. 25
BRILLIANT	Philadelphia	Copenhagen	L. April 4
BROADMAYNE	Port Arthur (Texas)	Liverpool & Manchester	Arr. April 2
BULLMOUTH	Shanghai	—	L. April 2
BULYSSES	Soesoe	Channel	P. Cape Recife, Mar. 18
BURGERMEISTER PETERSEN	Hamburg	Philadelphia	Arr. April 8
CADAGUA	Dunkirk	Cardiff	Arr. April 8
CALCUTTA	San Francisco	Shanghai	Arr. Mar. 25
CARDIUM	Singapore	—	P. Sagres, April 9
CATANIA	Port Harford	San Francisco	Arr. Mar. 19
CAUCASIAN	Hamburg	—	P. Lizard, April 2
CHARLOIS	Antwerp	Philadelphia	Arr. April 8
CHESAPEAKE	Calcutta	—	L. Mar. 29
CHESTER	Antwerp	Philadelphia	Arr. April 7
CIRCASIAN PRINCE	—	—	Trading on W. C. of South Amca.
CLAM	Shanghai	—	L. Mar. 23
COWRIE	Balekpappan	—	L. April 7
COL. E. L. DRAKE	Sabine Pass	New York	P. Diamond Shls., Mar. 4
CYMBELINE	Cardiff	Rio Janeiro	P. Barry Island, Mar. 17
CZAR NICOLAI II.	Hamburg	Batoum	P. Gibraltar, Mar. 29
DAGHESTAN	Tyne	Port Arthur (Texas)	Arr. April 6
DELAWARE	Bombay	—	Arr. Suez, April 8-9
DEUTSCHLAND	Rotterdam	New York	P. Prawle, April 6
DIAMANT	New York	Hamburg	Arr. Mar. 19
ELAX	Rotterdam	Philadelphia	P. Lizard, April 9
ELISE MARIE	Philadelphia	Amsterdam	L. April 2
ENERGIE	Philadelphia	Hamburg	P. Prawle Pt., April 10
ERIVAN	Philadelphia	Hamburg	L. Mar. 29
ETELKA	Blaye	Philadelphia	L. Mar. 26
EUPLECTELA	Manchester	Philadelphia	P. Eastham, Mar. 27
EXCELSIOR	Tyne	New York	Arr. April 8
EZIO	—	—	Coasting Peru
FRANCE MARIE	Marseilles	Philadelphia	P. Gibraltar, Mar. 13
GEESTEMUNDE	Tyne	New York	P. Butt of Lewis, April 8
GENESSE	Manchester	New Orleans	At St. Michaels, April 3
GEORGIAN PRINCE	Philadelphia	Havana	P. Del. Break., Mar. 31
GOLDMOUTH	Rotterdam	—	At Port Said, April 2-3
GUT HEIL	Stettin	Philadelphia	Arr. Tyne, April 10
HAINAUT	Antwerp	Alexandria	Arr. April 8
HELIOS	Philadelphia	Flushing	P. Reedy Island, Mar. 29
HOTHAM NEWTON	Antwerp	Middlesbro'	Arr. April 6
HOUSATONIC	Philadelphia	Avonmouth	Arr. April 8
IMPERIAL	—	—	Tr. on Lakes btn. U.S. and Can.
JOANNIS COUTZIS	Batoum	London	P. Constant'ple, April 6
J. B. AUG. KESSLER	Batoum	Alexandria	At Port Said, April 8-9
JAMES BRAND	Tyne	Philadelphia	Arr. April 9
KURA	Tyne	New York	P Butt of Lewis, April 1
LA CAMPINE	Philadelphia	Antwerp	L. April 1
LA FLANDRE	Philadelphia	Ghent	P. Dungeness, April 9
LA HESBAYE	Antwerp	Batoum	P. Constant'ple, Mar. 30
LA MADELEINE	Rouen	Barcelona	L. Algiers, April 9
LA VIGUESA	Seville	Philadelphia	L. Mar. 27
LACKAWANNA	Bengkalis	Nordenham	Arr. April 7
LANSING	Astoria	San Francisco	Arr. Mar. 14
LE COQ	Rouen	Philadelphia	L. Mar. 27
LOUTSCH	Odessa	Batoum	L. April 5
LUCERNA	Tyne	Philadelphia	P. Dunnet Head, April 6
LUCIFER	Manchester	New York	Arr. Mar. 26
LUCIGEN	Philadelphia	Liverpool	P. Del. Break., Mar. 29
LUCILINE	Rouen	Philadelphia	P. Lizard, April 1
LUMEN	Venice	Batoum	P. Constant'ple, April 2
LUX	Rouen	Philadelphia	Arr. April 9
MANHATTAN	Batoum	Lisbon	Arr. April 9
MANNHEIM	New York	Hamburg	Arr. Mar. 15
MARGARETHA	Kustendje	Brake	Arr. April 1
MAVERICK	San Diego	San Francisco	Arr. Feb. 20
METEOR	Genoa	Odessa	Arr. Mar. 5
MEXICAN PRINCE	Liverpool	Cuba	L. April 9
MIRA	Rotterdam	Penarth	P. Lizard, April 10
MUREX	Singapore	Tientsin	Arr. Mar. 31
NARRAGANSETT	London and Tyne	New York	L April 10
NERITE	—	—	Tr. in China Seas
NEW YORK	Southampton	New York	Arr. April 2
OCEAN	Batoum	—	P. Constant'ple, April 8
OILFIELD	Tyne	Philadelphia	Arr. Mar. 23
ORANJE PRINCE	Banes	Flushing	Arr. April 8
ORIFLAMME	Philadelphia	Havre and Rouen	At Havre, April 7
OSCEOLA	Tampa	New Orleans	Off Hd. of Passes, April 8
OTTAWA	Philadelphia	Tampico	P. Reedy Island, Mar. 30
OURAL	Batoum	Antwerp	P. Constant'ple, April 10
PALEMBANG	Saigon	Palembang	L. Mar. 9
PAULA	Swinemunde	Hamburg	Arr. Mar. 16
PECTAN	Tyne	London	Arr. April 8
PENNOIL	Tyne	Philadelphia	L. Mar. 27
PERLAK	Calcutta	Aroe Bay	L. Mar. 20
PHOEBUS	Hamburg & Tyne	New York	P. Dunnet Head, April 8

Vessel.	From.	For.	Latest Date and Position.
PINNA	Hamburg	Tyne	Arr. Mar. 12
POTOMAC	Liverpool	Batoum	P. Constant'ple, April 1
PROMETHEUS	New York	Rotterdam	Sp. April 5, 43 N., 42 W.
PRUDENTIA	Kustendje	Rouen	P. Sagres, April 8
QUEVILLY	Rouen	Philadelphia	Arr. April 4
RION	Port Talbot	Batoum	L. Mar. 22
ROCK LIGHT	Rotterdam	New York	P. Lizard, April 4
ROSSIJA	Middlesbro'	Leghorn	Arr. April 3
ROTTERDAM	Rotterdam	New York	Arr. April 3
RUSSIAN PRINCE	Philadelphia	Havana	P. Del. Break, Mar. 29
SALAHADJI	—	—	Tr. Sts. Settlem'ts and Java Seas
SAXOLEINE	Tyne	Philadelphia	P. Dunnet Head, April 6
SEMINOLE	Shanghai	San Francisco	Arr. Mar. 25
SILVERLIP	Singapore	—	L. Mar. 25
SINGU	—	—	Tr. in East Indies
SNOWFLAKE	Penarth	Cuba	L. Mar. 23
SOPHIE	Granatello	Batoum	L. Constanti'le, April 4
SPONDILUS	Singapore	—	L. April 6
STANDARD	Stettin & Tyne	Philadelphia	P. Dunnet Head, April 2
STROMBUS	New York	Calcutta	At Colombo, about April 10
SURAM	London	Blyth	Arr. Mar. 14 for United States
SUWANEE	London	Philadelphia	P. Scilly, April 10
SVIET	Batoum	Odessa	L. Mar. 22
TELENA	Cardiff	Constant'ple	P. Barry Island, April 10
TEREK	Batoum	London	P. Gibraltar, April 9
TIFLIS	Barcelona	Batoum	L. April 8
TIOGA	Sunderland	New Orleans	Off the Wight, Mar. 27
TONAWANDA	Hankow	Shimonoseki	Arr. Mar. 17
TROCAS	Palembang	Singapore	Arr. April 2
TURBO	Hamburg	Batoum	L. Constanti'le, April 2
TUSCARORA	San Francisco	Madras	At Yokoha, prev. Mar. 28
TWINGONE	Rangoon	Calcutta	L. April 1
VEDRA	Hamburg	Tyne	Arr. Mar. 30
VILLE DE DIEPPE	—	—	In Port Havre, April 3
VILLE DE DOUAI NowEdward Dawson)	Middlesboro	Ibrail	L. Constanti'le, April 3
VOLUTE	Palembang	—	L. April 1
WASHINGTON	Bombay	—	Arr. April 5
WEEHAWKEN	Liverpool	New York	P. Fastnet, April 10
WILLKOMMEN	Rotterdam	Philadelphia	P. Dover, Mar. 30
WINNEBAGO	San Francisco	Shanghai	Arr. abt. April 4

Latest Market Intelligence.

LONDON OIL MARKET.

Supplied by Messrs. Benjamin & Gee, 31, St. Mary Axe, E.C.

April 12th, 1907.

The price of refined petroleum remains unaltered as follows:—Russian and Roumanian, 6¼d.-6⅜d.; American, 6¾d.-6⅞d.; Water White, 7¾d.-7⅞d.

LUBRICATING OILS

Are unchanged, the present prices being:—

American pale, £7 7s. 6d. to £11.
American dark cylinder, from £7 12s.
American filtered cylinder, from £11.
Shellene, £5.
No. 1 Russian, £10 7s. 6d.

TURPENTINE.

American Turpentine remains very firm for Spot deliveries, being quoted at 51s. 6d. For forward it is quoted May, 49s. 3d.; May to June, 48s. 6d.; June, 48s.; July to December, 45s. 6d.

LIVERPOOL OIL MARKET.

April 11th.

Refined oils are quiet, and sellers quote 6⅛d. for Russian, Galician or Roumanian; and 6⅝d. to 7⅝d. per gallon for American.

Petroleum Spirit continues at 1s. 0½d. to 1s. 3d. per gallon for American deodorised, according to quality on the spot.

LATEST AMERICAN PRICES.

New York, April 6th.

Refined, in cases, is steady at 10·65; Standard White, 8·20; Credit balances, 1·95c.

Philadelphia, April 6th.

Standard White is still quoted at 8·15.

RUSSIA.

Baku, April 8th.

The Baku oil market is firm. Light crude oil, spot, 27½ copecs per pood; residuals, in ships, delivery during navigation, 29¼; kerosene, in waggons, 32 copecs.

BELGIUM.

Antwerp, April 5th.

The petroleum market is unchanged. Price of Standard White, spot, 20½ francs per 100 kilos.

FRANCE.

Paris, April 6th.

Illuminating oil is quoted in bulk, in whole tank waggons, 22 francs per hectolitre; spirit, 29·25 francs per hectolitre. Special white oil, 30 francs per hectolitre.

GERMANY.

Hamburg, April 5th.

The kerosene market is firm. The price of American Standard White is 6·80 marks per 50 kilos, Russian, 6·55 marks.

ROUMANIA.

April 2nd.

	Francs.
Crude oil from different fields, including pipe line charges, per 100 kgs.	4·00-4·20
Refined oil, exclusive of taxes	10·00- —
Motor benzine, including taxes	16·00-18·00
Benzine, doubly refined	24·00-25·00
Residuals in tank waggons, at refinery	3·20-3·60
Paraffin	120·00-125·00
Lubricating Oils—	
Agricultural	30-32
Prime	35-37
Extra	40-42
Royal	45-46

In barrels free on rail including octro tax of 12 fcs. per 100 kilos

Prices for Export.

Refined oil in tank waggons, per 100 kgs.	8·50- —
Benzine, sp. gr. 0·710-0·715	21·00-22·00
,, sp. gr. 0·720-0·725	19·00-20·00
,, sp. gr. 0·730-0·740	13·00-14·00
,, sp. gr. 0·745-0·755	9·00-10·00

INDIA.

Bombay, March 21st.

Petroleum is steady.

Standard Oil Co., of New York.

Current rates are:—

American, "Snowflake," 150 deg.	Rs.	6	0	2
,, Chester, 125 deg.		4	8	2
,, Monkey Brand, 125 deg.		4	2	2
,, Bulk, 125 deg. (in local made tins)		3	10	0
,, ,, 125 deg. (8 Imperial gallons)		3	0	0
,, "White Camelia" brand, 125 deg.		No stock.		

The Asiatic Petroleum Company, Limited.

Current rates are:—

"Swan" Brand oil, in tins, per pair	3	4	0
Sumatra "Rising Sun," bulk, per unit	3	0	0
,, ,, tins, per pair	3	10	0
Silverlight cases, per case	4	8	0
Sumatra, "Anchor" per case	4	14	0

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IMPORTS of PETROLEUM into UNITED KINGDOM

Specially prepared for this Journal by the Custom House.

FROM 25TH MARCH TO 1ST APRIL, 1907—

Date.	Port and Importers.	Description.	No. of Gals.	Port Whence.
Mar.	London—			
25	Ocean Oil Co.	Lub.	2,810	Philadel.
25	Grindley and Co.	,,	14,400	,,
25	Page, Son and East	,,	130	Antwerp
25	Leach and Co.	,,	1,120	Ghent
26	International Trading Co.	,,	880	Antwerp
26	Snowdon, Sons and Co.	Lub.Gr.	1,200	Hamburg
26	H. Finkler and Co.	Resid.	9,960	Trieste
26	Anglo-American Oil Co.	Lub.	48,000	Philadel.
26	Asiatic Petroleum Co. (Telena)	Benzine	713,000	Pulo Samboe
27	London & India Docks Co.	Lub.	240	Antwerp
27	Page, Son and East	,,	520	,,
30	Homelight Oil Co. (Cymbeline)	Lamp	543,000	Batoum
30	Scott's Wharf	Lub.	6,400	New York
	Liverpool—			
25	Liverpool Storage Co.	,,	15,000	Philadel.
25	Crew, Levick and Co.	,,	45,140	,,
25	,,	M.Colza	3,180	,,
25	Meade-King, Robinson & Co.	Lub.	46,840	,,
25	A. Hopps and Son	,,	11,670	,,
25	W. B. Dick and Co.	,,	8,100	,,
25	,,	,,	35,800	New York
25	,,	Lamp	1,860	,,
25	A. Hopps and Sons	Lub.	2,550	,,
25	Colly and Co.	,,	440	,,
25	Bramwell, Fern and Co.	L.Comp.	400	,,
25	George B. Taylor	Lub.	53,480	,,
25	,,	,,	11,000	,,
25	E. H. Kellogg and Co.	,,	1,000	,,
25	Valvoline Oil Co.	,,	3,080	,,
25	Cunard Steamship Co.	,,	1,800	,,
26	Meade-King, Robinson & Co.	,,	2,400	,,
26	Burnaby and Chantrell	L.Comp	1,790	,,
26	Ismay, Imrie and Co.	Lub.	1,600	,,
26	American Line	,,	910	Philadel.
28	Meade-King, Robinson & Co.	Spirit	36,000	Rotterdam
28	,, (Broadmayne)	Gas	506,200	Pt. Arthur
	Bristol—			
26	Anglo-Bosphorus Oil Co.	Lub.	2,000	Hamburg
	Goole—			
27	Goole Steamship Co.	Spirit	80	,,
	Hull—			
27	W. Gilyott and Co.	Lub.	95,080	New York
28	Wilsons and N.E. Railway Shipping Co.	,,	13,200	,,
	Manchester—			
27	Worthington and Boler	,,	2,000	Philadel.
28	C. H. Morton and Sons	,,	1,280	,,
28	Geo. B. Taylor	,,	97,680	,,
28	,,	,,	120	Hamburg
Mar.	Middlesbro'—			
25	E. Harris and Co.	Lub.	2,120	Antwerp
	Newcastle—			
25	Tyne-Tees Steamship Co.	,,	3,720	,,
	Newport—			
25	Jones, Heard and Co.	,,	6,000	New York
	Glasgow—			
27	Anchor Line	,,	47,520	,,
27	J. and A. Allan	,,	1,030	Boston
30	,,	,,	70,070	Philadel.
	Grangemouth—			
27	W. Graham-Yooll and Co.	Lamp	1,200	Hamburg
28	,,	,,	2,000	,,
28	J. Currie and Co.	Lub.	770	,,
	Leith—			
27	G. Gibson and Co.	,,	800	Antwerp
27	W. Graham-Yooll and Co.	Lamp	10,290	Hamburg
28	,, ,,	,,	6,890	,,
28	J. Currie and Co.	Lub.	150	,,
28	Geo. Gibson and Co.	,,	920	Antwerp
	Total		2,496,820	

———

FOR THE WEEK ENDED APRIL 8TH, 1907—

Date.	Port and Importers.	Description.	No. of Galls.	Port Whence.
April	London—			
2	G. W. Sheldon and Co.	Lub.Gr.	1,090	New York
2	Anglo-American Oil Co. (Hermione)	Gas	1,644,160	Philadel.
2	Page, Son and East	Lub. Gr.	2,480	Antwerp
2	Bryce and Rumpff	Lub.	120	Bremen
2	T. H. Lee	,,	530	Hamburg
3	London and India Dock Co.	,,	1,200	,,
3	Fielder, Hickman and Co.	,,	7,200	Philadel.
3	Mordaunt Bros.	,,	11,700	New York
3	Produce Brokers' Co.	,,	4,800	,,
3	James and Palmer	,,	8,050	,,
3	Fielder, Hickman and Co.	,,	6,000	,,
3	Anglo-American Oil Co. (Narragansett)	Lamp	2,647,490	,,
3	,, ,,	Lub.	276,960	,,
3	,, (Suwanee)	Fuel	112,000	Kustendji
3	,, ,,	Spirit	867,550	,,
4	,,	Lub.	54,480	New York
4	G. W. Sheldon and Co.	,,	8,920	,,
4	London and India Dock Co.	,,	5,280	,,
4	,,	,,	3,200	Philadel.
4	Wilkins, Campbell and Co.	Lub.Gr.	2,480	,,
5	,,	,,	2,480	,,
5	E. J. Wilkinshaw	Lub.	6,000	,,
5	Worthington and Boler	,,	4,440	,,
5	W. B. Dick and Co.	,,	6,000	,,

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Date	Port and Importers.	Description.	No. of Galls.	Port Whence.
April.				
5	G. and H. Green	L.Comp.	3,330	New York
6	Scott's Wharf	Lub.	2,000	Philadel.
6	A. Brown and Co.	,,	6,800	,,
6	Anglo-American Oil Co.	,,	27,200	,,
6	,,	Lub.Gr.	16,000	,,
6	London and India Docks Co.	Lub.	3,200	,,
8	,,	,,	3,800	Hamburg
	Liverpool—			
2	W. Gibson and Sons	Lamp	2,050	Boston
2	Vacuum Oil Co.	Lub.	8,000	Philadel.
2	Crew, Levick and Co.	,,	14,670	,,
2	G. B. Taylor	Lub Gr.	8,760	,,
2	Valvoline Oil Co.	Lub.	6,150	New York
2	D. Currie and Co.	,,	150	Hamburg
3	Pickford's, Ltd.	,,	1,330	,,
3	Worthington and Boler	,,	1,600	Philadel.
3	W. B. Dick and Co...	,,	4,260	,,
3	Meade-King, Robinson & Co.	,,	8,400	,,
3	,, ,,	,,	32,400	Baltimore
3	Liverpool Storage Co.	,,	2,400	New York
3	Burnaby and Chantrell	L.Comp.	390	,,
3	Geo. B. Taylor	Lub.	400	,,
3	Duncan Fox and Co.	Gasoline	600	Callas
4	Midland Railway Co.	Lub	440	Philadel.
4	A. Hopps and Sons	Resid.	2,680	Newp't Nws.
5	,,	,,	10,000	Philadel.
5	Crew, Levick and Co.	Lub.	20,750	,,
6	Meade-King, Robinson & Co.	,,	9,600	,,
6	,, ,,	,,	38,040	Baltimore
6	Pickford's	,,	1,500	New York
8	Geo. B. Taylor	,,	55,400	,,
8	W. B. Dick and Co.	,,	25,610	,,
8	Cunard Steamship Co.	,,	2,600	,,
8	Valvoline Oil Co.	,,	6,150	,,
8	E. H. Kellogg and Co.	,,	1,000	,,
	Barrow—			
2	Anglo-American Oil Co. (Weehawken)	Lamp	133,610	Philadel.
2	,, ,,	Naph.	913,760	,,
	Bristol—			
2	W. Smith and Co.	Lub.	35,400	New York
4	H. R. James and Sons	,,	35,960	New York
4	,,	M.Colza	2,400	,,
5	Western Pet. Co. (Rion)	Lamp	18,200	Philadel.
8	W. Smith and Co.	Lub.	20,880	New York
	Grimsby—			
2	J. Sutcliffe and Sons	,,	380	Antwerp
4	,,	,,	1,080	Antwerp
4	,,	,,	620	,,
	Hull—			
4	Wilsons and N.E. Railway Shipping Co.	,,	900	Hamburg
4	,,	,,	1,080	,,
4	Hull & Neth. Steamship Co.	Tar oil	3,360	Rotterdam
6	Helmsing and Son	Lub.	400	Riga
April.	Manchester—			
2	Meade-King, Robinson & Co. (Broadmayne)	Gas	445,000	Pt. Arthur
2	Crew, Levick and Co.	Lub.	13,380	Philadel.
2	,,	M.Colza	9,540	,,
2	G. Fairclough	Lub.	710	New York
2	Bramwell, Fern and Co.	,,	3,300	,,
4	Meade-King, Robinson & Co.	,,	20,640	Philadel.
6	Worthington and Boler	,,	1,000	,,
6	Schofield and Co.	,,	2,750	Reval
6	Bramwell, Fern and Co.	,,	1,440	Antwerp
6	Geo. B. Taylor	,,	138,760	New York
6	Lamport and Holt	,,	1,600	,,
	Newcastle—			
4	W. Swanston and Sons	Lamp	440	Amsterdam
4	Tyne-Tees S.S. Co.	Lub.	2,560	Antwerp
4	,,	,,	160	Hamburg
	Swansea—			
5	Burgess and Co.	L.Paste	180	Hamburg
	Glasgow—			
2	Anchor Line	Lub.	128,410	New York
	Grangemouth—			
4	W. Graham-Yooll and Co.	Lamp	1,600	Hamburg
5	J. Currie and Co.	Lub.	4,160	,,
	Belfast—			
2	T. Dixon and Co.	,,	1,260	Baltimore
4	J. C. Pinkerton and Co.	,,	210	Hamburg
	Total for Week		7,957,270	
	Total for the Period		10,454,090	

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ENGLISH PATENTS.

(Specially contributed by Messrs. EDWARD EVANS & Co., Consulting Engineers, Chartered Patent Agents, and Enrolled Patent Attorneys, of the United States, of 27, Chancery Lane, London, W.C.)

Application Filed in Great Britain.

Improvements in Driers for Paints, Varnishes and Oils, and in the Manufacture of such Driers.—Georges Guittet, 77, Chancery Lane, London. No. 6717 of 1907.

Application Published in Great Britain.

Process for the Solidification of Petroleum or Other Mineral Oils and the Transformation of the Solidifed Hydrocarbon into Soap.—Victor Joseph Kuess, of 2, Rue Gharnouta, Tunis, Africa. No. 14568 of 1906.

This relates to the solidification of petroleum and other mineral oils by means of a saponifiable animal substance and a saponifiable vegetable substance in equal proportions, together with water, caustic potash, boric acid or other derivative from boron, and, if desired, the subjection of this paste at a determined temperature to a lixivium composed of caustic soda, caustic potash and a little oil of coprah.

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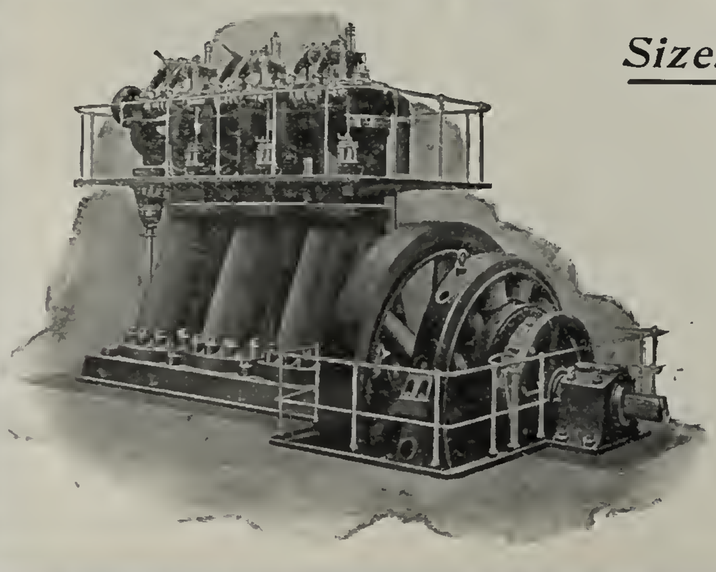

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The Petroleum Review.

By PAUL DVORKOVITZ.

Vol. XVI. *(New Series.)* April 27th, 1907. No. 397.

Editorial Notes.

The Coming Petroleum Congress.

With the drawing near of the time for the holding of the Third International Petroleum Congress, arrangements are approaching completion, and, as our readers would notice from our last issue, a programme which gives every promise of being unprecedentedly attractive is being prepared. Above all things, the importance of the coming International gathering cannot be over estimated. Apart from the Congress assembling under the direct patronage of the Government, from whom it has received a very substantial subsidy, the delegates will have ample opportunities of making close inspection of the oil fields, and therefore apart from the purely scientific nature of the Congress, the popular educational side is bound to be one producing a permanent good.

Essentially an International Gathering.

The international character of the Congress will not by any means be limited to its name. A glance down the information which appears upon another page of this issue, sets all doubts to rest on this point. The various Continental countries each have a long list of technical and scientific gentlemen who have signified their intention of giving their support to the gathering, and this being so, it consequently follows that the literary contributions at the Congress will be highly authoritative and at the same time deal with those numerous subjects so closely identified with the petroleum industry. Even from the Continents beyond the seas the Congress is being viewed with considerable favour as a power for good, and the heavy list of supporters from the United States, shews that that great producing centre is to be well represented.

Wake up, England!

There is, however, much to be done, ere England occupies that position it should do at such an important international assembly. Up to the present, the list of well known gentlemen who have signified their intention of visiting Roumania for the Congress is very small, and can be counted on the fingers of one hand. This, of course, is not as it should be. The inauguration of such gatherings was due to strenuous efforts which were put forward in this country, and it would be a pity if now, just when these International Conferences have received that recognition they are entitled to, that England should take a back seat. Such a step would certainly be a reflection upon the interest which this country takes in petroleum matters generally. We are pleased to say that the appeal issued a fortnight ago by Dr. Dvorkovitz has met with some measure of success, but a significant fact is that so many of our recognised leaders in the English petroleum trade put forward the same old excuse of "lack of time" as an apology for withholding their support from such a gathering. We trust that those gentlemen who have paid little attention to these congresses in the past, will arouse themselves in a manner which befits Englishmen and England.

The Burmah Oil Company's Success.

The report and balance sheet of the Burmah Oil Co., which we publish upon other pages of this issue, is one which will well repay close perusal, shewing as it does what can be accomplished, year in and year out, by a company whose operations are guided by men of judgment and experience, and whose policy is to take every advantage of opportunity when it occurs. The progress of the Burmah Oil Co. has, to be very conservative, been little short of phenomenal, and during the past twelve months the success of the past has been repeated, for a net profit has been earned of little short of £400,000, which, after allowing for all those matters which a wise board has to reckon with, warrants a distribution of a dividend of 20 per cent. to the ordinary shareholders. Some time ago, it will be remembered, the company decided to test some rather extensive new territories, but up to the present the operations here have not resulted in oil being found in commercial quantities, and consequently the total expenditure in this respect has had to be written off; though, we think we are correct in saying that it is still an open question whether prolific stores will eventually be tapped in these new districts. As announced in the Review at the time, the Burmah Oil Co. directors have brought to a practical issue the question of transportation of oil to the company's refineries, and during the past year they have sanctioned the work of building a trunk pipe line which will naturally result in a great saving of transportation expenses. All things considered, it appears there are ample grounds to justify the directors in their hopes that the present year will be equally favourable with the past, and we congratulate the general body of shareholders, first, in having in their hands such a good investment; and, secondly, in being the happy possessors of a directorate which even by reason of its heavy holding of shares must of necessity always be on the *qui vive* in regard to the interests of the shareholders.

Progress in Italy.

Italy is on the way to progress. The Government has now decided to lighten the petroleum import duty by reducing it from 48 to 24 lire per 100 kilogrammes. That the adoption of such a reasonable and sensible measure will be hailed with satisfaction on all hands is admitted, for it will certainly tend to ameliorate a crying grievance, and lessen a trade handicap. In the houses of the poor, the Italian visitor must have been forcibly impressed with the woeful lack of adequate light, but now matters are to be remedied, and the more general adoption of petroleum as an illuminating power is now assured. For some time past, pressure has been brought to bear upon the Italian Ministry with a view to reducing the petroleum tax, but the plea has been that this could not be afforded. Happily, the administration now views matters in another "light," and one can confidently look forward to commercial extensions in Italy from one end of the country to the other.

March in the American Oil Fields. The results of the March operations in the American fields suggest the coming of a period which will witness a wonderful revival in the search for oil throughout the States. In spite of the fact that it is becoming increasingly more difficult to keep up the production of high grade Pennsylvanian oil, one satisfactory feature of the operations is that the new wells recently brought in are somewhat above the average drilled during the past few years in regard to their productivity. So far as the Mid-Continental and Illinois fields are concerned, the developments are resulting in an increasing production which is only limited by the facilities of the pipe lines at present. There is now a tendency to curtail drilling for a time, but still the new production shews increases, and during the month reached almost 40,000 barrels. Upon another page we give a few details concerning the American operations during the month.

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THE RUSSIAN LABOUR TROUBLES.

The chief item of interest at Baku now is the strike of sailors and officers of the Caspian fleet, which has been going on now for over a month. According to the latest reports negotiations between the owners and the strikers continue. On most questions an agreement has already been reached, but there is a great obstacle in the fact that owing to the reduced output there is not enough oil for shipment to employ all the vessels now engaged.

During the past fortnight reports have also been reaching us of minor strikes in the Baku oil fields, such as the strike at the electric power station at Balakhany, which caused a temporary cessation of work on some but oil properties, also a strike at Nobel's fitting shops, so far these several outbreaks are not serious.

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THE TEXAS OIL FIELDS, LIMITED.

Judgment has been obtained in the American Federal court against the Hogg-Swayne Syndicate, a corporation in which the late Ex-Governor Hogg was interested. It was rendered in favour of the Texas Oil Fields, Ltd., an English corporation, for the sum of $30,000 with interest at 6 per cent. per annum from date. The parties who formed the Hogg-Swayne Syndicate and against whom the judgment is rendered, are Richard E. Brooks, Harris Masterson, James W. Swayne, William F. Casey and Will C. and Ima Hogg, independent executor aud executrix of the estate of James S. Hogg.

The suit originated out of a transaction that occurred several years ago when oil was first discovered on Spinde Top in Jefferson county.

As our readers are doubless aware, the Texas Oil Fields, Ltd., has not been engaged in any operations for the past two years, but as the result of enquiries at the company's offices, our representative learned that the directors have the favourable decision of the American court before them, and there is every probability that the shareholders will be called together in the near future.

LONDON OIL SHARE MARKET.

Friday, April 26th, 1907.

Business in all departments of the London Stock Exchange continues to be very restricted, the reduction in the Bank Rate to 4 per cent. failing to give animation as had been anticipated. The Oil Share section has been very quiet, prices being practically unchanged since our last issue, with the exception of Shell Transport Ordinary, which have risen 2s. 9d. per share to 44s. 3d. to 45s. 3d., and Anglo-Russian Oil, which have been in request, and after first being quoted at $\frac{1}{32}$-$\frac{3}{32}$, improved further to $\frac{1}{16}$-⅛. Russian Ordinary lost 1s. on balance at 7s. and 8s., and these are the only alterations to report, for although business was "marked" both in Assam Oil and European Preference Shares, quotations in both instances shewed no change.

General prices have ruled as follows:—Assam Oil ½-⅝, Bibi-Eybats ⅜-½, Debentures 84-89, Baku Ordinary 2s. 6d. to 3s., Preference 4s. to 5s., Californian Oilfields 6¼-¾, Refineries 1⅞-2⅛, European Preference $\frac{1}{16}$-$\frac{3}{16}$, Debentures 82-86, Russian Preference 8s. 6d. to 9s. 6d., Debentures 89-92, Schibaieff Ordinary 4s. 6d. to 5s. 6d., Preference 2-2½, Shell Transport Preference 9½-10, Spies $\frac{15}{32}$-$\frac{17}{32}$.

At the end-April Settlement which commenced on Wednesday last, Continuation rates for Oil Shares were fixed at about 6 per cent. to 8 per cent., while a comparison of making up prices shews an advance of 10½d. per share in Anglo-Russians at $\frac{3}{32}$, $\frac{1}{16}$ in Californian Oilfields at 6½, 3s. 1½d. in Shell Transport Ordinary at 2¼d., and of 3d. in Spies at ½.

On the other hand, Baku Ordinary at 2s. 9d. lost 3d. per share and Preference at 4s. 9d. a similar amount. Russian Ordinary 6d. at ⅜ and Preference 3d. at ⅞, while Schibaieff Ordinary at ¼ and Preference at 2⅛ were unchanged.

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THE TIN PLATE MARKET.

Messrs. Norton, Owen & Co., of 4, Bishopsgate Street Within, London, E.C., report under date 25th April, 1907, as follows:—

Prices continue firm, and the minimum selling prices remain unchanged as below. The mills are all fully employed, and the trade is in a healthy condition, as it is estimated that the present consumption is about equal to the output; indeed there is some pressure for prompt delivery. There are no indications of giving way in prices of materials. The pig iron market is again buoyant; the demand for steel bars is active, with prices firm; and tin has advanced £6 10s. 0d. per ton on the past fortnight, closing to-day at £192 5s. 0d. for spot Straits. The tin plate makers combination appears to be working satisfactorily. It has undoubtedly had the effect of imparting great steadiness to the market, with the result that confidence has been re-established, and buyers are placing orders more freely. An impression appears to have got abroad that the object of the combination is to drive prices up, but we may here repeat what we have before stated, viz., that the openly declared policy of the makers is not to unduly force prices but to check the ruinous and unnecessary cutting of prices and to endeavour to secure a living profit.

IC	18¾ × 14	124 sheets	110 lbs.	15/3 to 15/4½ per box.
IC	19¼ × 14	120 ,,	110 ,,	15/3 ,, 15/4½ ,,
IC	20 × 10	225 ,,	156 ,,	21/4 ,, 21/6 ,,

F.o.b. Welsh ports, according to position of works. Tin lining and iron hooping extra.

Operations of the Baku Petroleum Refineries in 1906.

We are now in possession of the official statistics dealing with the operations of the Baku petroleum refineries in 1906. All the refineries at Baku come into three classes, namely:—(1) Kerosene refineries, where the crude oil is treated with a view to the production chiefly of illuminating oil and residuals for fuel purposes, but yielding also as bye-products comparatively small quantities of solar oil, gasolene, benzine, etc.; (2) Lubricating oil refineries, where part of the residuals produced at the kerosene refineries is redistilled with a view to producing lubricating oils; and (3) Benzine refineries, where part of the gasolene produced at the kerosene refineries is redistilled for the purpose of separating from it light benzine. In the case of the refineries, which comprise all these three branches, for statistical purposes they are treated as being separate refineries.

I.—Kerosene Refineries.

The quantity of crude material submitted to distillation at the kerosene refineries in 1906, compared to 1905, was as under (in poods):—

	1906.	1905.
Crude Oil	290,818,752	285,750,219
Light Gasolene	2,590,560	2,073,947
Kerosene Distillate	—	805,732
Total	293,409,312	288,629,898

Thus in the quantity of oil distilled, 1906 shewed an increase against 1905 by 4,779,424 poods or 1·66 per cent.

The output of distillates was as under:—

	1906 (in poods).	Per cent. on crude.	1905 (in poods).	Per cent. on crude.
Kerosene Distillate	75,507,643	25·73	67,637,730	23·43
Light Gasolene	10,600,280	3·64	10,253,635	3·55
Light Solar Oil	1,156,355	0·39	1,591,127	0·55
Heavy Solar Oil	323,968	0·11	—	—
Astrale and Astraline	23,608	0·01	23,450	0·01
Pyronaphtha	142,067	0·05	184,755	0·06
Residuals	196,879,911	67·01	200,748,255	69·55
Benzine Distillate	463,282	0·16	93,634	0·03
Total	285,097,115		280,532,586	
Loss in distilling	8,273,629	2·90	8,097,312	2·82
		100·00		100·00

It is interesting to note that in 1906 the yield of kerosene from the crude increased to 25·73 per cent. as against 23·43 per cent. in 1905, which was done at the expense of the residuals, the yield of the latter having declined from 69·55 per cent. in 1905 to 67 per cent. in 1906. Under normal conditions about 30 per cent. of the crude oil is utilised as illuminating oil, but now, owing to a great scarcity of liquid fuel and the comparatively small demand for illuminating oil owing to the falling off in the export trade, the refiners find to their advantage to increase the bulk of the residuals by leaving in them a considerable part of the illuminating oil fractions.

The following were the quantities of oils used as fuel for distilling at the kerosene refineries in 1906, compared to 1905:—

	1906. Poods.	1905. Poods.
Crude Oil	2,161,465	2,712,718
Residuals	3,520,330	4,446,416
Light Gasolene	3,278,291	3,509,335
Refined Kerosene	13,352	—
Light Solar Distillate	13,800	15,037
Heavy Solar Distillate	—	78,084
Benzine	233,566	153,921
Total	9,220,798	10,915,511

The consumption of fuel for distilling declined from 3·78 per cent. of the crude distilled in 1905 to 3·14 per cent. in 1906.

The quantities of distillates submitted to refining in 1905, as compared with those of 1905, were:—

	1906.	1905.
Kerosene Distillate	74,953,317	64,904,153
Light Solar Distillate	257,045	181,179
Astrale and Astraline Dist.	18,005	22,150
Pyronaphtha Distillate	146,809	136,954
Total	75,375,176	65,244,436

The quantities of refined products obtained were:—

	1906. Poods.	1905. Poods.
Kerosene	73,177,292	62,990,812
Refined Solar Oil	258,531	148,884
Astrale and Astraline	17,547	21,528
Pyronaphtha	142,316	129,579
Total	73,596,686	63,290,803

The loss in refining in 1906 amounted to 1,778,490 poods or 2·36 per cent. of the distillates refined against 1,953,633 poods or 3 per cent. in 1905.

The following were the quantities of chemicals used for refining the products of the kerosene refineries in 1906, compared to 1905:—

	1906. Quantity in poods.	Per cent. on Distillates refined.	1905. Quantity in poods.	Per cent. on Distillates refined.
Sulphuric Acid	307,870	0·41	343,541	0·52
Caustic Soda	114,849	0·15	126,385	0·19

II.—Lubricating Oil Refineries.

The quantity of crude material submitted to distillation at the lubricating oil refineries in 1906, compared to 1905, was as follows:—

	1906.	1905.
Residuals	45,374,991	34,774,324
Heavy Solar Distillate	28,850	—
Cylinder Oil Distillate	14,119	35,117
	45,417,960	34,809,441

The output of distillates was as under:—

	1906. Quantity in poods.	1905. Quantity in poods.
Light Solar Distillate	3,532,658	7,031,727
Heavy Solar Distillate	3,955,029	3,169,699
Spindle Oil	1,562,895	1,022,427
Machine Oil	12,374,819	8,794,903
Cylinder Oil	498,166	398,547
Viscosine	14,632	15,686
Vaseline Distillate	733,348	73,800
Goudron	11,891,983	5,540,617
Lubricating Oil Residuals	7,060,698	7,030,740
Sabonaphtha	14,446	4,895
Total	41,638,674	33,083,041
Loss in distilling	3,785,349	1,276,400

The quantities of various oils used as fuel for distilling at the lubricating oil refineries were as under:—

	1906. Poods.		1905. Poods.
Crude Oil	399,080	..	335,662
Residuals	4,682,536	..	4,146,367
Light Gasolene	40,600	..	228,298
Heavy Solar Distillate ..	498,996	..	644,713
Goudron	511,254	..	188,133
Kerosene Distillate ..	—	..	43,000
Lubricating Oil Residuals.	15,000	..	—
Total	6,147,466	..	5,586,173

The fuel consumption by the lubricating oil distilleries in 1906 represented 13·54 per cent. on the residuals distilled, against 16 per cent. in 1905. The loss in distilling in 1906 was 8·3 per cent., against 3·7 per cent. in 1905.

The following quantities of lubricating oil distillates were submitted to refining:—

	1906. Poods.		1905. Poods.
Spindle Oil	1,415,557	..	1,003,418
Machine Oil Distillate..	12,142,014	..	8,540,184
Cylinder Oil Distillate..	442,376	..	295,923
Total	13,999,947	..	9,839,475

The quantities of refined products obtained were:—

	1906. Poods.		1905. Poods.
Spindle Oil	1,264,597	..	898,682
Machine Oil	10,950,929	..	7,685,889
Cylinder Oil	363,143	..	254,784
Total	12,578,669	..	8,839,355

The loss in refining in 1906 amounted to 1,422,178 poods, or 10·14 per cent., against 1,000,120 poods, or 10·16 per cent.

The quantities used in the refining of lubricating oil in 1906, compared with 1905, were:—

	1906. Quantity in poods.	Per cent. on oils refined.	1905. Quantity in poods.	Per cent. on oils refined.
Sulphuric Acid ..	320,411	2·28	342,112	3·47
Caustic Soda ..	41,653	0·29	46,560	0·47

III.—Benzine Refineries.

The following quantities of oils were submitted to distillation in the benzine refineries in 1906, compared to 1905:—

	1906.		1905.
Light Gasolene	708,641	..	888,621
Benzine Distillate	11,857	..	5,200
Heavy Gasolene	—	..	7,394
Total	720,498	..	893,831

The output of distillates was as under:—

	1906.		1905.
Benzine Distillate	329,474	..	255,164
Heavy Gasolene	371,830	..	601,905
Total	701,304	..	857,069
Loss in distilling ..	19,194	..	36,752

Thus in 1906 the distillation of light gasolene yielded 45·7 per cent. of light benzine and 51·6 per cent. heavy gasolene, 2·7 per cent. being loss in distillation. In 1905 the corresponding figures were: Light benzine 28·56 per cent., heavy gasolene 67·40 per cent. and loss 4·0 per cent.

Of the benzine distillate, 317,514 poods were submitted to refining, and yielded 308,772 poods of refined benzine, 8,742 poods having been lost in refining. The quantites of chemicals used for the refining of benzine in 1906 were: Sulphuric acid 18,413 poods and caustic soda 276 poods; for 1905 the figures were: Sulphuric acid 7,910 poods and caustic soda 1,824 poods.

It is interesting to point out the fact that out of a total of 10,600,000 poods of gasolene produced in the kerosene refineries in 1906 only 708,000 poods were utilised for the production of light benzine. Of the rest 3,318,000 poods were used as fuel and 2,590,000 poods were put back into the kerosene stills. This is not a fact peculiar of the past year, but is a normal feature of the Bakn refining industry.

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PRODUCTION OF ENGLISH COMPANIES IN RUSSIA.

Baku Russian Petroleum Co., Ltd.—The production for the week ended 13th April was 289,000 poods, or 4,659 tons; and for the week ended 20th April was 272,000 poods, or 4.385 tons.

Russian Petroleum and Liquid Fuel Co., Ltd.—The production for the week ended 14th April was 206,000 poods, or 3,321 tons; and for the week ended 21st April was 201,000 poods, or 3,421 tons.

Spies Petroleum Co., Ltd.—The output for the week ended 14th April was 179,880 poods, or 2,901 tons; and for the week ended 21st April, 154,400 poods, or 2,490 tons.

The European Petroleum Co., Ltd.—The production for the week ended 14th April was 135,026 poods, or 2,177 tons; and for the week ended 21st April was 140,651 poods, or 2,268 tons.

CLASSIFIED IMPORTS INTO UNITED KINGDOM UP TO APRIL 22nd, 1907

IN GALLONS.

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Country.	Illuminating.		Lubricating.		Residuals.		Gas Oil. (Solar)		Benzine.		Fuel Oil.		Other Descriptions.		Totals.	
	Since Apr. 8.	From Jan. 1.	Since Apr. 8.	From Jan. 1.	Since Apr. 8.	From Jan 1.	Since Apr. 8.	From Jan 1.	Since Apr. 8.	From Jan. 1.	Since Apr. 8.	From Jan. 1.	Since Apr. 8.	From Jan. 1.	Since Apr. 8.	From Jan. 1.
Austria ...	—	—	—	61,640	17,810	67,770	—	—	—	—	—	—	—	—	17,810	129,410
Belgium ...	—	153,410	31,750	184,260	—	—	—	—	—	—	—	—	—	590	31,750	338,260
Canada ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dutch India.	—	—	—	—	—	—	—	—	1,299,840	6,553,670	—	—	—	—	1,299,840	6,553,670
Germany ...	9,320	1,116,390	101,110	484,220	—	2,000	—	—	—	80	—	—	—	2,200	110,430	1,604,890
Holland ...	—	920	—	3,440	—	—	—	—	67,570	191,250	—	—	4,850	47,010	72,420	242,620
Roumania ...	1,313,280	2,416,110	—	—	—	—	898,100	1,964,000	—	1,459,000	—	238,700	—	—	2,211,380	6,077,810
Russia ...	3,277,730	9,435,610	15,220	1,509,770	—	—	—	—	1,800	2,400	—	—	120	120	3,294,870	10,947,900
U.S.A. ...	4,528,230	30,615,070	1,839,710	12,738,700	—	434,690	373,670	15,886,490	—	1,375,780	—	1,332,000	370,730	845,690	7,112,340	63,228,420
Other Countries	—	260	480	15,890	—	—	—	—	—	2,500	—	40	—	840	480	19,530
	9,128,560	43,737,770	1,988,270	14,997,920	17,810	504,460	1,271,770	17,850,490	1,369,210	9,584,680	—	1,570,740	375,700	896,450	14,151,320	89,142,510

THE BURMAH OIL COMPANY, LIMITED.

REPORT OF THE DIRECTORS.

The directors of the Burmah Oil Co., Ltd., have recently issued their report for the past year. It shews that the gross profit on the year's working, including £10,591 1s. 2d. brought forward from 1905, amounted to £578,155 17s. 8d., which after deducting income tax, depreciation, insurance, etc., of £189,060 18s. 9d. leaves a net profit of ... ... £389,094 18s. 11d.

From this there fall to be deducted the interim dividends paid on 8th November, 1906:—

	£	s.	d.	£	s.	d.
(1) Six per cent. preference shares of £1 each—dividend, less tax	7,125	0	0			
(2) Six per cent. second preference shares of £10 each—dividend, less tax ..	14,250	0	0			
(3) Ordinary shares—dividend, free of tax	55,000	0	0			
				76,375	0	0
				312,719	18	11
The directors propose that there be placed to general reserve..				100,000	0	0
Leaving				212,719	18	11

Out of which the directors recommend the following final dividends and bonus for the year 1906, viz.:—

(1) On the six per cent. first preference shares of £1 each— 7⅕d. per share (equivalent to six per cent. per annum from 30th June to 31st Dec., 1906), amounting, after deducting Income Tax thereon, to.. ..	7,125	0	0			
(2) On the six per cent. second preference shares of £10 each— 6s. per share (equivalent to six per cent. per annum from 30th June to 31st Dec., 1906), amounting, after deducting income tax thereon, to	14,250	0	0			
(3) On the ordinary shares of £1 each— (*a*) 2s. per share (equivalent to 20 per cent. per annum from 30th June to 31st Dec. 1906), free of Income Tax, amounting to ..	110,000	0	0			
(*b*) Bonus of 1s. per share, free of Income Tax, amounting to	55,000	0	0			
				186,375	0	0
Leaving to be carried forward ..				£26,344	18	11

These amounts making, with interm dividends paid on 8th November, 1906, in the case of the first and second preference shares six per cent., and in the case of the ordinary shares 15 per cent. and bonus of five per cent. for the year.

The company has had a properous year during 1906 and in view of this the directors are confident that their proposal to place £100,000 to general reserve will meet with the approval of the shareholders. This addition will increase the amount at credit of general reserve to £340,000.

The increase in investments account is due to calls paid on the shares of the Concessions Syndicate, Ltd., held by the Burmah Oil Co., Ltd., and practically represents this company's proportion of the cost of the year's operations in Persia. As the amount standing at the debit of investments account represents the cost of shares taken up from time to time in oil and exploiting companies in which it was advisable that the Burmah Oil Co., Ltd., should be interested, and, as these companies have not up to now been so successful in their operations as it was at one time thought that they might be, the directors have taken advantage of the present opportunity to write down the book value of these investments by £60,000 to £90,295 4s. 2d.

During 1906, as in previous years, vigorous development and prospecting work has been carried on over large tracts of country in Burma. While the all-round results have again been satisfactory in the older territories, oil has not yet been struck in paying quantities in the new territories being tested and the directors have considered it prudent, in addition to writing off the total cost of development work incurred during the year and of the past expenditure on fields now abandoned, to place £85,000 to a field reserve account.

Considerable additions have been made to the company's distributing installations in India, and all its tankers, tank installations, etc., have been maintained throughout the year in an efficient condition. A sum of £51,213 17s. 11d. has been written off for depreciation.

The arrangement entered into with the Asiatic Petroleum Co., Ltd., towards the end of 1905, continues in force, and prices of kerosene oil in India have been maintained at a satisfactory level. At the same time, there has been a healthy increase in the consumption of kerosene in the Indian markets.

All the company's other products have gone steadily into consumption at remunerative prices.

Towards the end of the year the directors decided to proceed with the laying of the main pipe line for the conveyence of crude oil direct from the fields to the refineries, and to issue the remaining 25,000 six per cent. £10 second preference shares to provide a portion of the funds necessary for the carrying out of this scheme. The shares were offered for subscription to the shareholders of the company on the 27th December last, and, having been largely overapplied for, were allotted to applicants *pro rata* according to their share holding in the company. The balance of the cost of the line will be provided for out of the funds in hand.

At an extraordinary general meeting, held on the 5th July last, Mr. Robert Gourlay, LL.D., and Mr. James Hamilton were elected directors of the company, bringing up the board to the maximum number authorised by the articles of association.

In view of the great expansion of the company's business and business relations, it was found that the time had come when it was necessary for the company to be adequately represented in London, as contemplated in its memorandum and articles of association, and a local board has been constituted there, consisting of all the directors of the company along with Mr. H. S. Ashton and Mr. Thos. B. Bowring. These two gentlemen are resident in London and have had a long experience of the petroleum industry.

So far as the current year has gone prices for all the company's products have continued on a satisfactory basis and it seems reasonable to hope that the directors will again be able to submit a favourable statement of accounts with their next report.

[A full report of the company's meeting, held yesterday at Glasgow, will appear in our next issue.—Ed., *P.R.*

THE BURMAH OIL COMPANY, LIMITED.

BALANCE SHEET as at 31st December 1906.

LIABILITIES.

	£	s.	d.	£	s.	d.
Share Capital Authorised—						
250,000 First Preference Shares of £1 each				250,000	0	0
75,000 Second ,, £10 ,,				750,000	0	0
1,500,000 Ordinary ,, £1 ,,				1,500,000	0	0
				£2,500,000	0	0
Issued—						
250,000 First Preference Shares of £1 each ..	£250,000	0	0			
50,000 Second Preference Shares of £10 each ..	500,000	0	0			
1,100,000 Ordinary Shares of £1 each	1,100,000	0	0			
				1,850,000	0	0
1,400,000						
Five Per Cent. Terminable Debentures	£100,000	0	0			
Five Per Cent. Debenture Stock	340,000	0	0			
				440,000	0	0
Debenture Stock Redemption Account				60,000	0	0
Share Premium Account				135,805	0	0
Capital Reserve				80,000	0	0
General Reserve				240,000	0	0
Insurance Fund				75,000	0	0
Marine Insurance Funds				31,757	17	2
Sundry Creditors, including Advances				137,632	14	3
Profit and Loss Account—						
Balance	£389,094	18	11			
Less Interim Dividend.	76,375	0	0			
				312,719	18	11
				£3,362,915	10	4

ASSETS.

	£	s.	d.	£	s.	d.	£	s.	d.
Refineries, including Lands, Buildings, etc., as per last Balance Sheet				754,246	18	5			
Added during 1906				111,613	2	8			
				865,860	1	1			
Less Depreciation—									
In previous years	£123,333	19	3						
For year to 31st Dec., 1906 ..	42,962	18	0						
				166,296	17	3			
							699,563	3	10
Oil Wells, Boring Plant, Purchased Oil Lands, Tanks, Buildings, Stores, etc., as per last Balance Sheet				771,816	5	2			
Added during 1906				141,991	6	1			
				913,807	11	3			
Less amount written off from 1906 Revenue				129,005	18	8			
				784,801	12	7			
Less amount at Fields Reserve Account				85,000	0	0			
							699,801	12	7
Pipe Lines, as per last Balance Sheet				42,555	19	11			
Added during 1906				3,763	0	9			
				46,319	0	8			
Less Depreciation—									
In previous years ..	£6,474	8	1						
For year to 31st Dec., 1906 ..	3,984	9	3						
				10,458	17	4			
							35,860	3	4
Tankers and Tank Installations, including Launches, Cargo Boats, etc., as per last Balance Sheet..				562,521	11	8			
Less Stocks of Stores.. ..				126,704	15	8			
				435,816	16	0			
Added during 1906				21,366	5	6			
				457,183	1	6			
Less Depreciation—									
In previous years	£111,163	10	1						
For year to 31st Dec., 1906 ..	51,213	17	11						
				162,377	8	0			
							294,805	13	6
Stocks of Stores in Tankers and at Tank Installations							108,816	0	6
Stocks of Stores at Refineries							93,517	3	4
Stores, etc., Afloat							25,718	1	4
Stocks of Products in Rangoon and at all Agencies							339,089	16	2
Investments at Cost as per last Balance Sheet				112,309	4	2			
Added during 1906				37,986	0	0			
				150,295	4	2			
Less amount written off from 1906 Revenue				60,000	0	0			
							90,295	4	2
Sunday Debtors							169,049	11	10
Unexpired Insurance Premiums, etc.							14,561	17	11
Money on Deposit and Cash in Bank and on hand							791,837	1	10
							£3,362,915	10	4

PROFIT AND LOSS ACCOUNT to 31st December, 1905.

	£	s.	d.
Income Tax	15,551	9	9
Depreciation on Refineries	42,962	18	0
Insurance Fund	15,000	0	0
Debenture Stock Redemption	20,000	0	0
Premium on Above	1,000	0	0
Directors' Fees..	2,200	0	0
Auditors' Fee	84	0	0
Salaries, Office Rent, Charges, etc.	10,412	11	0
Interest on Debentures	21,850	0	0
Investments, amount written off	60,000	0	0
Balance carried to Balance Sheet	389,094	18	11
	£578,155	17	8

	£	s.	d.	£	s.	d.
Balance brought forward				129,841	1	2
Less—						
Final Dividend, 1905 ..	£69,250	0	0			
Reserve Fund	50,000	0	0			
				119,250	0	0
Leaving				10,591	1	2
Profit, per Rangoon Accounts, etc., from 1st Jan. to 31st Dec.				548,256	11	5
Transfer Fees				182	2	6
Interest Account				19,126	2	7
				£578,155	17	8

The Coming Roumanian Petroleum Congress.

The third International Petroleum Congress, which will meet in Bucarest in September next, has already been joined by a great number of persons, and it may now be safely predicted that the Congress will have a notable success from the point of view of the practical results which it will produce. In fact, specialists of the highest competence in questions relating to petroleum have already inscribed their names either to send or read papers dealing with subjects of general, technical, and scientific interest.

Among the persons who have already promised their support in this direction it is sufficient to mention the names of the following, whose authority is universally recognised :—

Austria—Dr. Rudolf Zuber, Prof. at the Lemberg University; Höfer, Geheimrat, Prof. Leoben; Zaloziecki, Prof., Lemberg.

Germany – Prof. Holde, Direct. Königl. Material-Prüfungsamt, Gross-Lichterfelde/Berlin; Prof. Beyschlag, Geheimrat, Direct. geologischer Landesanstalt, Berlin; Dr. Paul Schwartz, Berlin; Dr. Krämer, Prof., Berlin; Prof. Emil Treptow, Oberbergrat, Freiberg/Sachsen; Dr. Wichelhaus, Geh. Reg. Rat. Prof. Technol. Institut., Berlin; Richard Sorge, Ingenieur, Lankevitz/Berlin.

Russia—Lidoff, A. P., Prof. of technology at Kharkoff; Tichvinsky, M., Prof. at the Polytechnic School at Kieff; Rakusin, M., Chemical Engineer, Moscow.

France—Jules Bergeron, Prof. à l'Ecole Centrale, Paris; Mante, Direct. général de la Société Industriele des pétrole, Paris; André; Forestier; Neuburger; de Monzie, Chef de Cabinet au Ministère de la Justice; Marcel Sembat, Député de la Seine; Marcel Gascheau, Mathieu, F.

Algeria—Georges Lesueur, Ancien. Sénateur; Echalard, Ingenieur; Blazy, A.; Lippmann, Présid. de la Sociét. des Ingén. civ. de France; Vimont; Hulster de.

England—Prof. R. J. Anderson, Galway; Mr. A. Adiassevich, London; Dr. Paul Dvorkovitz, London.

Italy—Federico Sacco, Prof. Ecole Polytechn. de Torino; Capacci Celso, Ingénieur des Mines, Florence.

Belgium—Auguste Macquet, Direct. de l'Ecole des Mines de Mons; Paul Le Grand, Direct. de la Sociét. belge de forage, Bruxelles.

Sweden—Prof. A. Werner Cronquist, Inspect. des Matiéres Explosives, Stokholm.

Hungary—Loczy, L., Prof. à l'Université de Budapest; Dr. Etienne Freund, Budapest; Jacques Kanitz, Budapest.

Servia – Tovan Cvijió, Prof. à l'Université de Belgrade.

Bulgaria—Petko Teodoroff, Ingénieur des Mines, Sophie.

United States—Dr. John Branner, Prof., Stanford University, California; David Day, Chief of the Geol. Survey of the United States; John Clarke, State Geologist, Albany; Alfred Lane, State Geologist, Lansing, Mich.; Lucas, Geologist, Washington D.C.

Canada—Prof. I. C. Laflamme, at the Laval University, Quebec.

The following local committees have already been formed and are holding regular meetings with a view to preparing for the Congress:—

Committee for France: —

Président—M. André, Lubricating Oil Importer.

Vice-Président—M. Forestier of the French Touring Club.

Secretary—M. Neuburger (honorary); M. A. Guiselin, Acting Secretary.

Delegates for the Congress:—

M. de Monzie, Chef de Cabinet au Ministère de la Justice; M. Marcel Sembat, Député de la Seine; M. Neuburger; M. C. N. Forestier, du Touring Club France; M. Marcel Gascheau de la firme Fenaille de et Despeaux; M. Mathieu, of the Soc. Méridionale des Pétroles.

Committee for Algeria:—

Président—M. Georges Lesueur, Ancien Sénateur du Départem. d'Oran.

Vice-Président—M. J. Echalard, Ingénieur.

Secretary—M. A. Blazy.

Delegates for the Congress:—

M. E. Lippmann, Ancien Présid. de la Soc. des Ingén. civ des Mines; M. Georges Lesueur, Ancien Sénateur; M. A. Blazy; M. Vimont, Command en Retraite, Exploitant. de Pétrole en Algérie; M. Echalard, Ingénieur; M. A. de Hulster, Entrepreneur de Sondages.

Committee for Italy:—

President—M. le Cav. E. Camerana, Chef du District Minier de Bologne.

Members—M. Capacci Celso, Ingénieur, Florence; M. le Dr. A. Corrot, Administrat. de la Societa Emiliana dei Petroli.; M. Clère, Administrat. de la Societa del Petrolio Italiano; M. Gabet H., Ingénieur des Mines; M. Grzybowski, Prof. à l'Université de Cracovie; M. A. Muggia, Prof. à l'Ecole Polytechnique de Bologne; M. F. Sacco, Prof. à l'Ecole Polytechnique de Turin.

Committee for Holland:—

M. Th. A. Delprat, Direct. de la Soc. de Pétrole, Moeara Enim, Amsterdam; M. Jhr. H. Loudon, Direct. de la Koninklike Nederlandsche Petroleum Maatschappy, la Haye; M. Lambrechtsen van Ritthem, Direct. de la Dordtsche Petroleum Maatschappy, Amsterdam.

MEETING OF THE FRENCH COMMITTEE.

A meeting of the members of the French and Algerian Committees in connection with the coming International Petroleum Congress was recently held in the rooms of the French Civil Engineers' Society, under the presidency of Mr. Albert Blazy. There was a good attendance of members, but regret was expressed that Messrs. M. Lippmann, G. Lesueur, Forestier, Gascheau, de Hulster, and Commandant Viment were unable to be present.

After reporting the withdrawal from the Committee of M. Mathieu, the Chairman detailed the correspondence which had taken place between the Central Committee in Roumania and their own body. He also referred to the fact that owing to his health, M. Neuburger did not think he would be able to take a very active interest in the Congress next September.

The Committee expressed regret at this, for M. Neuburger was one of the gentlemen who were instrumental in bringing the International Petroleum Congresses into being. The members also hoped that M. Neuburger would assist as far as possible in the forthcoming Congress, and that his health would improve as time went on.

Upon the proposition of the President, it was agreed that M. Guiselin, engineer, should act as Secretary of the Committee. It was mentioned that M. Guiselin had already taken an active interest in the subject of Roumania petroleum, and had had relations with many of the members of the Central Committee in Bucarest.

M. Guiselin agreed to accept the position, and assured the members that he would do all he could to assist in making the coming Congress more widely known.

It was decided that the delegates upon the French and Algerian Committees should endeavour to secure the co-operation of a larger number of persons interested in the petroleum industry, and that the members should meet again at the commence of May.

THE DEVELOPMENT OF THE FERGHANA OIL FIELDS.

On March 28th auctions were held for the purpose of leasing 40 dessatines of state petroliferous lands in the Ferghana Province. The terms were that the lease would be granted to the firm or person who offered the highest royalty in the form of a percentage of the production. The land is situated in the locality of Maili-Sai, and consists of one tract of 40 dessatines. In the event of the production on the concession, at any time, exceeding the minimum annual output, then on all oil produced above 4,000,000 poods the royalty is to be increased by 5 per cent. and a further increase of 5 per cent. is to be charged in the event of the production being more than double the minimum.

Within five years from the granting of the concession the concessionnaire has to construct a pipe line to a station of the Central Asian Railway, capable of delivering 60,000 poods of oil daily, and also has to deliver into the tanks or other storage installations at the station the oil produced by other concessionnaires in the Maili-Sai district, charging not more than $\frac{1}{50}$ copecs per pood per verst, and not more than 1½ copecs per pood for the whole distance.

Tenders have been invited from eight firms and the following individuals:—Lieutenant-General von Transe, Commandant of Gatchino, jointly with Baron Wolf-Stomerse, and also from Prince M. I. Khilkoff, late Minister of Communication.

The results of these auctions have not yet come to hand.

THE DIESEL ENGINE COMPANY'S NEW PAMPHLET.

The Diesel Engine Co., Ltd., of 179, Queen Victoria Street, London, E.C., who own the patent rights in the Britise Isles and the majority of the British colonies and dependencies for the well-known Diesel oil engines, have just issued their new pamphlet, which takes the form of a very useful brochure. The new publication, which will be forwarded upon application, not only gives the various standard sizes of the Diesel engines from the single to four cylinder, but treats in a very simple explanatory manner the advantages of the Diesel engine. A fact is recorded in the catalogue which is well worth mentioning here: It is that from March, 1898, until March of this year, over 3,000 Diesel oil engines were sold, these having a total output of 150,000 brake horse-power.

OPERATIONS OF ROUMANIAN REFINERIES DURING FEBRUARY.

The quantity of crude oil distilled at the Roumanian refineries during February was 57,890 tons. The quantities of various products obtained was as under:—

	Tons.
Benzine	10,847
Illuminating Oil	14.167
Lubricating Oils	2,856
Residuals	28,252
Total	56,123

The quantities of oils delivered from the refineries for home consumption were:—

	Tons.
Benzine	43
Illuminating Oil	2,924
Lubricating Oils	264
Residuals	23,034
Total	26,265

The stocks of oils at the refineries on February 28th were as under:—

	Tons.
Benzine	21,542
Illuminating Oil	47,366
Lubricating Oils	19,891
Residuals	38,941
Total	127,740

The quantity of paraffin scale delivered for home consumption was 32½ tons; the stock on 28th February was 11·8 tons.

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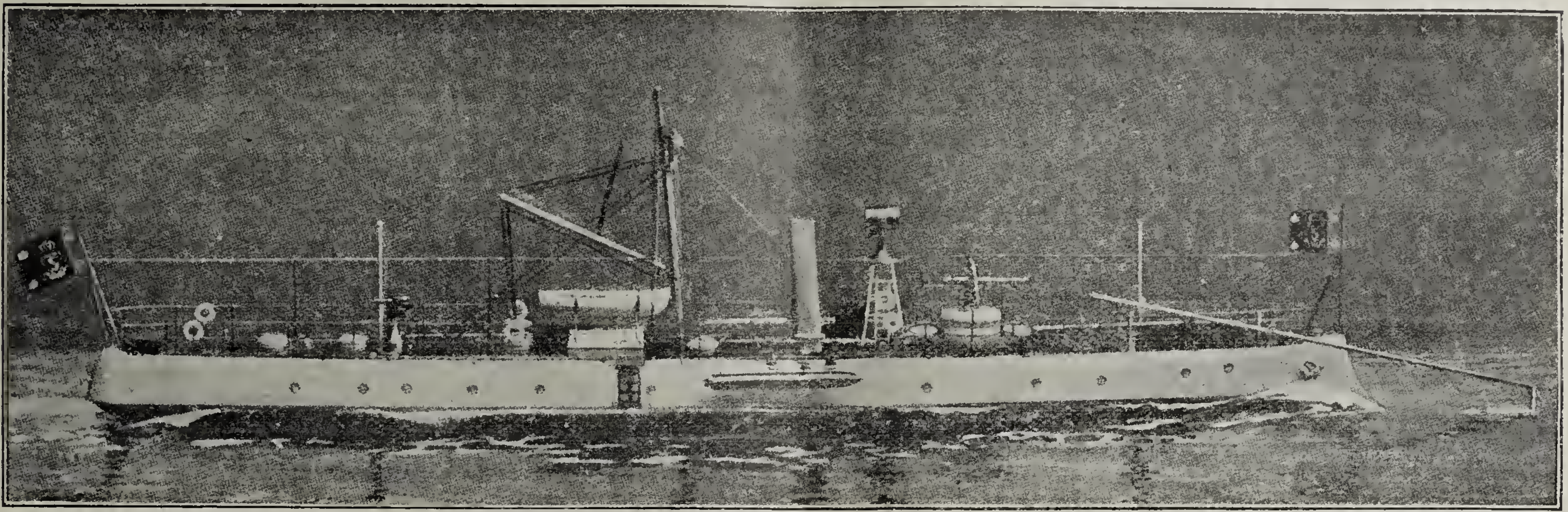
Lest we Forget.—No firm can become truly great without judicious advertising. Shall we send you the Review's rates?

OIL-FIRED TORPEDO VEDETTE BOATS FOR ROUMANIA.

Eight oil-fired screw torpedo vedette boats have recently been built for the Royal Roumanian Government by the Thames Iron Works, Shipbuilding and Engineering Co., Ltd. Each of the vessels are 100 feet long, 13 feet beam, with a draught of water of 2 feet 9½ inches, and a displacement of 51 tons, the general appearance of the craft being seen from the illustration which we herewith give. As a result of a trial of four hours' duration, the results obtained shewed that the mean speed was over 18 knots per hour, the boiler steam pressure was 182·3 lbs. per square inch, the pressure of steam in oil fuel burners was 181 lbs. per square inch, the pressure of oil for the burners was 7 lbs. per square inch, the temperature of oil in warming tank was 175° F., and the oil consumption was 1·73 lbs. per I.H.P. per hour. Owing to the very limited weight available for the machinery, it was necessary to resort to steam spraying. Four special burners have been fitted to each boiler two at the top having an angle downwards, and two on the bottom, at each side of the fire door, directed towards the centre. Oil bunkers are fitted on each side of the boiler, and a steam pump is used for pumping from them to the present-use tank. A steam coil is fitted in each tank for heating the oil, the steam running first through the present-use tank, and then through the coils in the bunkers. The water from these coils is run into the bilge to obviate any danger of getting oil into the feed-water. Both bunkers and the present-use tank act as settling tanks, and a valve is fitted at the bottom of each to drain off water as it collects. There has not been sufficient height in the craft to run the oil through the burners by gravity; the present-use tank is therefore worked under an air pressure from 1 to 10 lbs, the air being supplied by a small pump driven off the fan engine, and a reducing valve regulates the pressure.



The result of the four hours' trial which we give above was following only upon the use of the two top oil-burners. The power was maintained steadily, and generally there was absolutely no smoke from the funnels. The furnaces have, of course, been specially constructed for burning oil-fuel, the ordinary fire-bars being replaced by fire-brick, with slots for the admission of air.

THE OPERATIONS OF THE BAKU REFINERIES.

STATISTICS FOR DECEMBER, 1906 (in poods).

I.—Manufacture of Illuminating Oils.

Distillation.

	Submitted to Distillation.			Products Received.				
	Crude.	Other Products.	Total	Kerosene.	Residuals.	Other Products.	Loss.	Fuel used.
December	27,669,320	327,864	27,997,184	7,910,408	18,149,207	1,362,699	536,302	803,877

Refining.

	Submitted to Refining.			Refined Products Obtained.				Chemicals used.	
	Kerosene	Other Distillates.	Total.	Kerosene.	Other Products.	Total.	Loss in Refining.	Acid.	Soda.
December	7,935,543	18,210	7,953,753	7,758,770	15,822	7,774,592	179,161	32,497	13,233

II.—Manufacture of Lubricating Oils.

Distillates Received.

	Machine Oil.	Spindle Oil.	Cylinder Oil.	Goudron.	Solar Distillates.	Residuals.	Other Distillates.	Loss in Distilling.	Fuel used.
December	1,178,723	486,770	44,325	1,025,381	954,759	1,133,759	71,753	177,862	574,504

Refined Products Received.

					Chemicals used.	
	Spindle Oil.	Machine Oil.	Cylinder Oil.	Loss in Refining.	Acid.	Soda.
December	104,197	1,028,533	39,291	97,239	22,905	2,973

The output of benzine distillates amounted to 43,574 poods. The output of refined benzine was 10,160 poods.

MISCELLANEA.

BAKU PRODUCTION DURING MARCH.

The total production of crude oil at the Baku oil fields in March amounted to 39,582,000 poods, of which 549,000 poods were supplied by spouters.

The production of the leading firms during the month was as under:—

	Poods.
Nobel Bros.	5,400,000
Caspian and Black Sea Society	3,200,000
Mantascheff and Co.	2,400,000
Caspian Society	2,300,000
Baku Naphtha Co.	2,000,000
Moscow-Caucasian Naphtha Co.	1,500,000
Mirzoeff Bros.	1,400,000
Russian Naphtha Co.	1,300,000
Schibaieff Petroleum Co., Ltd.	1,200,000
Aramazd Co.	1,100,000
Baku Russian Petroleum Co., Ltd.	1,100,000
Zoubaloff	1,000,000
Pitoeff and Co.	1,000,000
Bibi-Eybat Petroleum Co., Ltd.	900,000
Naftalan Co.	800,000
Nagieff	700,000
Russian Petroleum and Liq. Fuel Co., Ltd.	700,000
Neft Co.	600,000
European Petroleum Co., Ltd.	600,000
Shikhovo Co.	500,000
Ter Akopoff Co.	500,000

◆

PRODUCTION OF CRUDE OIL IN GALICIA DURING FEBRUARY.

The following are the official statistics of the production of crude oil at the Galician oil fields in February, 1907, and the stocks of crude oil at the oil fields at the end of that month (in tons):—

	Production in Feb.	Stocks on Feb. 28th.
West Galicia—		
Potok	1,400	4,221
Rogi	560	1,121
Rowne	110	214
Tarnawa-Wielopole-Zagorz	1,286	4,505
Krosno	2,020	11,109
Other West Galician Fields	2,100	6,246
East Galician Fields—		
Boryslaw-Tustanowice	52,020	373,775
Schodnica	3,500	12.542
Urycz	1,200	7,063
Mraznica	60	358
Other East Galician Fields	960	980
Total	64,216	422,134

The stocks have increased during the month by about 8,000 tons, but the stocks at Boryslaw-Tustanowice, taken separately, have increased by about 12,000 tons. The loss and consumption at the oil fields in February amounted to 5,190 tons, of which 3,800 tons are at Boryslaw-Tustanowice.

◆

A NEW DEVICE FOR USE IN OIL WELLS.

We learn that arrangements are being made at Jennings, La., to test a recently-patented device for increasing the output of oil wells operated with compressed air. The device, which is known as the Butler air lift, has been invented by an old railway man, and has been in use for two years upon one of the American railroads, where it has been put into operation in a number of water wells. There, its use has been highly successful, and the inventor claims the same economy and efficiency in the application of the device to oil wells as has been shewn on water wells. The test at Jennings will in all probability be made upon one of the Heywood Oil Co.'s wells.

◆

THE PRODUCTION OF CANADA'S LATEST FIELD.

The Romney oil field, which is Canada's latest oil source, now reveals unpararelleled activity and the production is steadily increasing. The output at the present time is placed at about 40,000 barrels per month, and there is every prospect that this figure will be topped in a few weeks as some of the best tests are now materialising. The latest completion has actually produced no less than 2,000 barrels per day for some days. The Romney field, it may be mentioned, is only about four months old, being situated in what was not ong ago known as the "tall timbers."

◆

AN INTERESTING CASE IN THE AMERICAN COURTS.

A suit which is arousing considerable interest in natural gas and oil circles of the States is at present being fought in the courts of Indiana, where the Ilo Oil Co. is asking for an injunction against the Indiana Natural Gas and Oil Co. to stop the operation of the latter's immense pump station at Fowlerton. In brief, the contention of the plaintiff company is that the defendants are practically stealing the natural gas from the Grant county field by the use of its pumps, and is causing great pecuniary loss to the small oil producer in the field.

According to the claim, the Indiana Co. maintains at Fowlerton what is said to be the largest pumping station in the world. The power house is equipped with an immense battery of boilers and has four pumps of 250 horse-power each, making a total of 1,000 horse-power. These pumps are said to be connected with the pipe lines maintained by the defendant company, which taps the field worked by it in Grant county. The pipe line is about one mile and a-half in radius, and is connected at various points with suction branch pipes attached to the casing heads of the gas wells, which the company leases.

This mammoth equipment, the Ilo Co. declares, exerts such a suction on the field that the gas is drawn not only from the wells owned by the Indiana Co., but from the entire surrounding field, causing the supply to weaken, and hastening the entire ruin of the gas belt in that State.

THE OIL FIELDS OF CALIFORNIA.

Description of the Los Angeles District.

Recognising their future importance as producing regions in the world's supply of petroleum, the United States Geological Survey is now paying great attention to the various fields comprised in the State, and its experts have made extended visits to the different districts in order to prepare Governmental reports upon the exact state of the petroleum industry in the fields, and, perhaps what is more important, to give to the world that data concerning the individual territories which, as past experience has proved in. other fields, is bound to be invaluable.

The first report has now been issued for dissemination, and is from the pen of Mr. R. Arnold. The writer, first of all, touches upon the *locale* of the Los Angeles district, which he says comprises the productive oil fields immediately north and west of the city, being located from fifteen to twenty miles from the coast in the central part of Southern California. Three transcontinental railroads the Southern Pacific, the Atchison, Topeka and Santa Fe and the San Pedro, Los Angeles and Salt Lake—pass through it, and steamers touch at Port Los Angeles, Redondo and San Pedro, its ports of entry.

The city of Los Angeles covers an area of about 15 square miles, the greater portion lying west of Los Angeles river. To the south-east are the Raphetto hills, which with the Puente hills farther south-east, constitute the connecting link between the Santo Monica and Santa Ana ranges. The Elysian Park hills north of the city, trend north-east and south-west. Their south-western slope is gentle and extends into the great Los Angeles-Santa Monica plain. Their north-eastern slope is abrupt and parallels Los Angeles river. North-west of the Elysian Park hills is the eastern extension of the Santa Monica Mountains, somewhat isolated from the main range by Cahuenga Pass, which trends northwestward from Hollywood, a suburb of Los Angeles. The mountainous area east of Cahuenga Pass is cut into sharp ridges and deep canyons, and culminates in Cahuenga Park at an elevation of 1,825 feet.

The oil-bearing zone commences near the Catholic cemetery on Buena Vista Street at the southern base of the Elysian Park Hills, and trends in an almost westerly direction to a point north of West Lake; here it bends to north 60 degrees west and extends into the region south of Colegrove. Two miles southwest of Colegrove, on the almost level Los Angeles-Santa Monica plain, is the field locally known as the Salt Lake (so named from the principal company operating there), which though topographically isolated from the main Los Angeles field, is, nevertheless, probably genitically related to it. In discussing this subject it has been deemed advisable to provide the productive territory into four parts, differentiated more or less sharply along structural lines. The area extending eastward from the Sisters' Hospital to the eastern limit of the productive territory at the Catholic cemetery will be described as the eastern field; that extending from the hospital to a line passing northward through West Lake as the central field; that extending northwestward from the region about the Baptist College as the western field, and that on the Rancho la Brea, southwest of Colegrove, as the Salt Lake field.

The development of the Los Angeles oil district has taken place spasmodically, four periods of activity marking its history. The first period, during which the central field was first opened, covers the time from late in 1892 to 1895; the second, in which the eastern field was developed, includes 1896 and 1897; the third, or period of exploitation in the western field and the west end of the central field, embraces 1899 and 1900; and the fourth, which marks the development of the most important part of the district, the Salt Lake field, extends from 1901 up to the present time.

Development in the central field proceeded eastward until it encountered the disturbed and barren beds in the region just west of the Sisters' Hospital, where exploitation ceased. On the theory that this break was only local and that the productive zone continued eastward along the strike of the oil-bearing strata, a well was sunk by Maier and Zobelein at the corner of Adobe and College Streets in what is now the eastern field. This well was completed in November, 1896, and as soon as it was found to be successful many other wells were begun in the immediate vicinity, and by the middle of 1897 the wells in the new field were almost as closely crowded as those in the old or central territory. Prospecting was continued east of Los Angeles river, but no economically productive wells were developed.

The exploitation of the western field and the extension of the central field from the corner of Quebec Street and Ocean View Avenue westward took place largely during the latter part of 1899 and 1900. Some wells, notably the Ruhland, at the corner of Seventh and Hoover Streets, and several of the Maltman wells, north of the Baptist College, however, were sunk previous to 1897.

(To be concluded.)

THE AMERICAN FIELDS DURING MARCH.

The month of March witnessed great activity in connection with oil developments in the American fields, but according to details announced in the latest issue of the *Old City Derrick* the gains were mostly confined to the territory west of the Mississippi river. The greatest increase in new production came from the gusher strikes in the Creek Nation, Oklahoma, and in that section fifty wells had an initial production of over 300 barrels.

As our readers are aware, the supply of high grade oil has been constantly declining for months past, and the necessity for new territory is as great as ever. During March there was a considerable gain in the new production, and with the present area of productive territory and under the stimulus of an advancing market, it may be held up to the present daily yield for some time to come. But the output does not exceed 70,000 barrels per day, and is consequently less that the half of what it was when the high grade oil fields were in their zenith.

In the sections producing high grade oil, which include the petroleum regions of Pennsylvania, New York, West Virginia and South-eastern Ohio, there were 334 wells completed in March, which included 82 dry holes and 39 gas wells, which left 263 productive wells with a total yield of 2,980 barrels, or an average of 11⅓ barrels each. It will be observed that over 31 per cent. of the wells completed in March were destitute of oil in paying quantities.

A considerable gain, both in wells completed and in new production took place during the month in the Lima fields of North-Western Ohio, but this was not accompanied by any increase in field activity. The wildcatters were somewhat disposed to test new territory, and 13 dry holes were the result of their efforts. The new wells during the month were 86, and their production was about 900 barrels. At the close of the month the wells either in drilling or being completed were 133, as against 149 for the corresponding period of the preceding month.

In the Hoosier districts, 69 wells were completed in March, these including 14 dry holes. The new production was a little over 10 barrels average per productive well. This showing is much better than was the case in February. The number of wells which were abandoned during the month was 48, this being considerably less than the figure for February, which was 83.

So far as the Illinois territories are concerned, while fewer wells were completed in March than in February, there was a great gain in new production. The new operations at the close of the month revealed a decline, but with the approach of the summer a heavy increase in field activity is expected. There were 551 wells completed during the month, of which 60 were dry holes. The new producing wells yielded a total production of 10,400 barrels. These figures shew that, compared with February, there was a decrease in March of five completed wells, and a gain in new production of 500 barrels.

In the Kentucky-Tennessee districts over one half of the 17 wells completed during March were dry. The new production was 250 barrels, which is a slight gain over that of February, when only 13 wells were completed.

During the month production has made a new record for the Oklahoma and Kansas oil fields, with a notable increase in every branch of field operations. Perfect weather conditions, very productive territory, a steady market and extended distributing facilities are factors responsible for this result. Two years ago 400 to 500 wells were being completed each month, but most of them were in the northern division of the field, where small producers were the rule and added little to the total production. Since July, 1906, operations have extended southward, where very rich pools have been opened, and production steadily increased. The first three months of 1907 permitted the rapid development of one of the most productive pools of recent years, and the result is told in the totals of March operations. During the month 294 wells were completed that gave a total new production of 29,196 barrels, the Glenn district, in the Creek Nation, with 68 completions, reporting 19,075 barrels for each producing well—a remarkable showing. In the Cherokee Nation, the Osage reservation, Kansas and outlying districts 226 wells were completed in March, 205 of which were productive of 10,121 barrels of new oil, or an average of 40 barrels for each producing well, also a high average. At the close of the month, in all districts, 85 rigs were up and 266 wells were drilling, which is a decided gain over February and preceding months since July of last year. As nearly all this new work is located in proven territory, where nearly every venture will be a producing oil well, April gives promise of a better showing than March. As an offset to each month's increasing new production, the oil in every district of the field, with the exception of the Glenn pool and part of the shallow sand district of the Cherokee Nation, is being regularly handled by the pipe lines and the new production is absorbed by the decrease of old wells, which serves as a partial balance for the situation, but the hurried drilling of a pool as rich as the Glenn will hold the Mid-Continent production to its present stage for a time in spite of strenuous efforts on the part of the purchasing agencies to provide outlets. For the 31 days of March the daily runs by the Prairie Oil and Gas Co. have been 88,000 barrels, by the Gulf Pipe Line Co. 5,000 barrels, and by the Texas Co. for the last half of the month 6,000 barrels, making a total of about 97,000 barrels every day.

The Glenn territory witnessed the completion of 68 wells during the month, and the new production was 19,075 barrels. In February, which was the record period, there were 47 completions, 15,930 barrels new oil, three dusters and three gassers, and 26 rigs up and 56 drilling wells. Comparison of these figures shews an increase during March of 21 wells, 4,085 barrels new production, five dusters, two less gassers, an increase of 15 rigs and 20 drilling wells, indicating higher figures for April. Two dry holes on the south-west, a well so light it was abandoned on the north-east, and two light wells on the west preclude any extension of the producing area on three sides. Good producers along the north line of development make it reasonably certain that the producing sand will be found at least two miles further north than present limits, but it will be a pumping and not a gusher proposition; 290 wells have already been completed in what is known as the Glenn pool, 15 of which are dry. On an estimated average of 280 barrels per producing well, a total daily production of 76,160 barrels is shewn—an amount somewhat in excess of the estimated output, based on present pipe line runs of 39,000 barrels, but which could likely be put in tank for several days if every well were run to its capacity

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Saturday, April 27th, 1907.

THE SUEZ CANAL AND THE CARRIAGE OF BENZINE.

THE one topic of the past week which has alike aroused the interest of members of the trade and the general public—the decision of the Suez Canal Committee to allow the transport of petrol in bulk through the Suez—is not without its significance as affecting the future welfare of the petroleum industry. Through the medium of the daily press, the glowing accounts of the prospective reduction by 50 per cent. in the price of petrol, have caused more general interest to attach to the decision than would otherwise have been the case, yet, when the matter is shorn of all its colour (that colour which is necessarily imparted by the budding daily journalist) the fact remains that by the removal of the restrictions which have been so rigidly applied, a most decisive step forward is now marked.

At the commencement of every new era in commercial advancement, there has always been—and no doubt there always will be—a great amount of prejudice which has had to be lived down, but in no branch has this prejudice—mainly the outcome of ignorance—played such havoc and acted in so detrimental a manner to progress as has been the case in regard to the more popular use of benzine. No sooner was light petroleum spirit hailed as an ideal fuel for motor-cars, than authorities of every section of administration began to hedge around its transport a number of difficulties which have almost proved to be insurmountable. Local authorities laid down most drastic laws regarding its storage—laws which we have frequently contended were not warranted even on the ground of public safety: railway companies gave all the assistance they could to hinder its progress by enacting most unjustifiable laws regarding its carriage and classification; and the Committees in charge of the various great waterways almost throughout the world gave their united voice in placing as many obstacles in its way as they well could. In such matters one can possibly excuse the exercise of too rigid a policy at first, for experience has taught us all that in the long run these various anomalies right themselves in accordance with public desire, and the decision which was made known this week that the Suez Canal Commissioners had decided to remove the prohibition clause with reference to the carriage of bulk petrol through the Canal, is only an example of what can be accomplished not by spasmodic efforts at agitation, but by systematic and earnest representations on the part of those who suffer most by the drastic and unfair conditions laid down by those authorities who view progress in special branches of commerce with the gravest apprehension.

It is well known that the prohibition against steamers carrying petrol being allowed to pass through the Suez has proved to be a serious drawback in the transportation of benzine to this and other European counties, for it has necessitated a considerably prolonged journey round South Africa, and thus a cargo of bulk spirit from the Far East to London had to remain on the water three weeks longer than would have been necessary had it been able to perform the journey *via* the Suez and the Mediterranean.

At first the prohibition through the Suez was not felt so acutely, for the reason that there was no exceptionally heavy demand for petroleum spirit and so an occasional cargo or two sufficed to meet the needs of the motor industry for Far Eastern spirit. But as time went on, and the motor-car became not a luxury but a necessity in our every-day life, the demand for the petrol of the Far East grew even in greater ratio, for the sources of supply in America began to wane. How Sumatra has risen from quite an insignificant source of supply to be the one field to which, more than any other, this country looks at present for its motor spirit is best illustrated by the following details taken from the REVIEW's classified list of shipments to the United Kingdom. The figures are as under:—

Year.	Shipments of Petroleum Spirit from the Far East (in gallons).
1903	5,600,000
1904	4,400,000
1905	6,300,000
1906	15,000,000

While for the first three months of the present year we imported considerably over 5,000,000 gallons of petroleum spirit from the Dutch Indies, it will thus be seen that such shipments of spirit from the Far East to our shores—shipments which are greatly increasing month by month—render necessary the utilisation of a large fleet of oil tankers, and in each case the journey to England occupies approximately two months.

Without exception the vessels all run on liquid fuel, and consequently the traversing of the seas round the African Continent not only required the provision of a twenty days extra fuel supply (the tankers always return *via* the Suez), but to that same extent the more valuable cargo of petroleum spirit was "shut out." In other words, by reason of the prohibition through the Suez Canal, the journey was prolonged several weeks, and at the same time the carrying capacity of the steamers was enormously reduced, for fuel for so long a run not only took up the ballast room, but had to occupy two of the tanks which in the ordinary course of events would have been at liberty for petroleum spirit.

Thus in two directions, the decision of the Suez Canal Commissioners confers a direct benefit upon the transportation of petroleum spirit to our shores. Each of the tankers engaged in the Far Eastern petroleum spirit trade with this country will in future be able to complete two or three more journeys each year, and upon each of the whole of their trips there will be storage accommodation for several hundred tons of spirit, which room has in the past been taken up with the necessary fuel cargo.

It is a foregone conclusion that the new regulations will not only give a great impetus to the importation of petroleum spirit into England, but will put an end to the pessimistic views which have of late existed among influential members in shipping circles that unless more tankers were quickly put upon the service to the Far East, the stocks of that spirit in this country, as well as upon the Continent, would get dangerously low if not exhausted.

It is not for us to hazard an opinion as to the effect the new conditions will have upon the price which the consumer pays to-day for his motor spirit. Indirectly, of course, the new order of things is bound to be to his advantage, for not only will the transport of petrol be facilitated to a considerable extent, but something like £60,000 will be yearly paid to the Suez Canal authorities in the shape of dues for passage through the waterway, in which waterway we as a nation have large interests instead of its being spent in the taking of unnecessary journeys of thousands of miles round South Africa.

The making known of the decision recorded above marks the successful end of most earnest representations which have over and over again been made by Sir Marcus Samuel, the pioneer of the carriage of petrol in bulk, and in that light may well be regarded as a victory for the whole of the petroleum industry, but what is perhaps more important, it also marks the dawning of a period when prejudice shall be lived down, and when such a promising branch of the petroleum industry shall no longer be the target at which administrative authorities of every shape and form shall fling their mis-directed arrows.

Change of Address.—Our readers will kindly note that the Baltic Trading Co., Ltd., formerly of 117, Leadenhall Street, have now removed to 3-4, Lime Street Square, E.C., their telephone number at the new address being 2605 Avenue.

THE OIL MARKETS OF THE EAST.

A REVIEW OF OPERATIONS DURING 1906.

(From the "Neftiannoie Dielo.")

In writing a review of the oil markets in the Far East during 1906, the most conspicuous event which must be noted is that Russian oil there, which only a short time ago was one of the principal factors in the petroleum trade, almost entirely disappeared from the markets during the year. The general causes which brought about the decline in the Russian petroleum export trade are well known: the reduced output and consequent high prices have rendered competition on foreign markets for Russian oil exceedingly difficult, and in some countries altogether impossible. In the case of the Far Eastern markets there were also special causes such as the strikes at the Batoum case oil works and their long idleness. In the same manner as in Europe the ground lost by Russian oil was taken up by American oil, Roumanian and Galician; so in the Far East the trade lost by Russian oil went over to American, Dutch-Indian and Burmah oils, as sold there respectively by the Standard Oil Co., the "Shell" and Royal Dutch Companies, and the Burmah Oil Co.

Work at the Batoum case oil works was resumed in the latter part of the year and a few cargoes of case oil were shipped to the East, but it would be erroneous to assume that Russian oil will easily regain its old position there. Apart from the high prices of oil in Russia and the high railway and shipping rates the Russian exporters will have to reckon with the changed conditions and increased competition there.

The Burmah petroleum industry has during the last two years grown and developed enormously. The Burmah Oil Co., enjoying as it does the protection of the British authorities, ships its oils to India duty free, and has succeeded in securing a substantial part of the Indian oil trade.

On the Sunda Islands the "Shell" and Royal Dutch Companies have created a powerful trust, controlling numerous installations and agencies scattered over all the markets of the East, and enjoying many advantages in the supplying of oil to those markets. The Burmah and Dutch-Indian oils, it is true, are inferior in quality to American or Russian, but the consumers being poor and not particular, the quality of the oil plays a secondary part, so long as the price is low.

Simultaneously with the increased competition the nature of the import trade has also changed. As will be observed from the review of the markets of India, China and Japan, case oil imports are gradually giving place to imports in bulk and Russian exporters, in order to be able to successfully compete with their rivals must not only be in a position to supply the markets with a cheap oil, but also have to provide themselves with costly installations for the storage and distribution of bulk oil.

The Indian Markets.

On the Indian markets in 1906 various currents were to be observed, arising from various local conditions. In Calcutta there was a considerable advance in prices against 1905, whilst at Bombay prices changed very little, and at Karachi, on the contrary, there was a very marked decline.

At the beginning of the year, in consequence of the famine and other unfavourable conditions the whole trade, generally speaking, was far from satisfactory, and the turnover in petroleum products was greatly reduced. There was a marked improvement in the autumn, thanks chiefly to the good harvest, and the year closed with a very firm tone of the markets.

During the year no Russian oil was imported at all, but Russian sellers had on their hands small balances of stocks left over from the preceding year. These sellers, however, not wishing to entirely exhaust their stocks and hoping to ultimately get better prices, purposely restricted their sales, already small as they were. The result of this was that the case oil imports, which, we may mention by the way, were rapidly declining, went over entirely into the hands of the Standard Oil Co. With a view to compete more successfully against the Dutch-Indian refiners and the Burmah Oil Co., the Standard Oil Co. during the last two years began to import kerosene from California and New York in bulk, packing it on the spot in cans and cases. The oils from Burmah, Sumatra, and Borneo are imported in bulk only. It may, therefore, be expected that in the near future the imports of oil in cases will disappear altogether.

In 1905 the competition was particularly severe. In its desire to secure its predominant position on the markets of Western India, the Standard Oil Co., notwithstanding that it already enjoyed a monopoly of the case oil trade on those markets, during the whole of last year continued to cut prices. The result was that on the west coast of India prices were much lower than on the east coast. On the Calcutta market, where the consumption is very large, there was not such competition.

The most advantageous position on the Indian markets is occupied by the Burmah Oil Co., whose products are admitted into India duty free, whilst oils coming from Russia, America or Dutch-India have to pay an import duty of about 23s. per ton. The advantages enjoyed by the Burmah Oil Co. over its competitors will become still stronger after the completion of the pipe line from their wells to Rangoon, which will greatly reduce the cost of delivering the crude oil to the refineries and enable the company to further lower its prices.

The imports of lubricating oil are now still concentrated almost exclusively in the hands of the Standard Oil Co Last year, however, considerable quantities of such oil were delivered in India from the Dutch-Indies and Burmah. It is evident that the growth of their output will compel the Burmah as well as the Dutch-Indian industries to seek in India a market for their lubricating oils as well as for their illuminating oils.

The consumption of benzine is also growing with astounding rapidity, coupled with the development of automobile traction. This product is supplied to India exclusively from the Dutch-Indian Islands The United States can supply only limited quanties of this product, whilst the Burmah Oil Co. began to import benzine into India only quite recently. Not possessing sufficient supplies of this product and therefore unable to compete with the Dutch-Indian companies, the Burmah Oil Co. and the Standard Oil Co. last year came to an agreement with the last named firms for the division of the Indian markets for benzine. It may be mentioned here that the sale of benzine in India is hampered by many restrictions and the trade in it is attended by many difficulties.

The prices of kerosene at Bombay, Karachi and Calcutta at the beginning and end of 1906 were as under (in rupees, annas and peis) :—

	At beginning of 1906. Rupees, Annas and Peis.	At end of 1906.
Bombay—		
American, in cases	4 8 0	4 8 0
Russian ,, ...	4 4 0	4 2 0
Elephant, in tins..	3 10 0	3 10 0
Sumatra or Russian of the "Rising Sun" brand, in tins	3 10 0	3 10 0
Borneo, in bulk	2 13 0	2 8 0
Burmah, ,, ...	2 10 0	2 8 0
Karachi—		
American, in cases	4 0 0	4 0 0
Russian or Sumatra, in bulk ..	3 1 0	2 14 0
American, in bulk	3 0 0	2 14 0
Borneo, in tins	3 6 0	2 14 0
Burmah, in tins	2 10 0	3 3 0
Calcutta—		
American in cases	4 6 0	4 6 6
Russian, in cases	2 14 0	4 4 0
Sumatra, in bulk	3 0 0	3 3 0
American ,, ...	3 0 0	3 3 0
Borneo ,, ...	2 11 0	2 13 0
Burmah ,, ...	2 10 0	2 13 0

Chinese Markets (Shanghai).

Prices of kerosene at Shanghai were very low during the past year. This was due to the fact that the market was burdened with heavy stocks, which were left in the hands of the importers in consequence of the boycott of American goods in 1905. The depôts of the American importers were full up, and with a view to avoid any considerable losses from leakage and damage, the importers made strenuous efforts to sell their goods as quickly as possible. The market consequently became depressed and price began to fall.

In 1905, the Standard Oil Co. began to import Californian kerosene in bulk, packing it in tins and cases on the spot. Last year the bulk imports of the Standard increased, but on the other hand the imports in tins and case declined. The decrease against 1905 amounted to the substantial figure of 3,200,000 cases, whilst the increase in the imports of bulk oil, translated into cases, was only about 400,000 cases. Thus the imports of American kerosene into Shanghai decreased during the year by about 2,800,000 cases.

(*To be concluded.*)

RUSSIAN AND ROUMANIAN NOTES.

Roumanian Railways and Liquid Fuel.—In 1906 the locomotives of the Roumanian State railways consumed 65,820 tons of liquid fuel.

At Moreni, a new well of the Regatul Roman Co., and two new wells of the Romano-American Co., have reached the oil stratum. The output has not yet been ascertained, as the boreholes are now being cleared of sand.

Success at Calinet.—The Caroline well at Calinet, belonging to the Independenta Co., of Paris, has reached the oil stratum at a depth of 168 metres. The yield is about 30 tons daily. The company is now preparing to drill a second well.

The Tariff Conference of the Russian railways has resolved to lower the rate for carrying unrefined benzine from Grosny, on the Vladicaucasian railway, to Tchimion and Kokand stations on the Central Asian railway, and also to Skalmerjitza station.

Very Significant.—A sign of good omen for the Russian petroleum trade is the reappearance of the Anglo-American Oil Co. as a buyer of Russian oil at Batoum for export to Europe. It is reported that they have recently bought a cargo of kerosene at 1 copecs, f.o b. and intend buying further quantities.

A Much-Needed Map.—The Russian Government Geological Committee has informed the Baku Petroleum Association that they expect to complete the geological map of Bebe-Aibat for publication in 1908, whilst the geological maps of the Balakhany, Saboontchi and Ramany oil fields will be completed in 1910.

New Storage Installation at St. Petersburg.—The Neft Co. has leased a riverside plot of land at St. Petersburg, in the new port, for the purpose of erecting on it a storage installation for petroleum products. This depôt will have a siding connected with the Nicolaeff Railway.

***Re* Average Prices.**—A special Departmental Committee has been sitting at the Russian Ministry of Finance to consider the question of modifying the method of calculating the average prices which the lessees of Government petroliferous lands at Baku have to pay for the Government royalty share on the output of those lands.

A Much-Needed Reform.—The Tariff Committee of the Russian railways have decided to lower by 5 copecs the rate for carrying kerosene from Volga and Caspian ports to stations on railways running to Moscow. This is done with the object of drawing back to the railways the oil traffic, which has lately shewn a tendency to leave the railways in favour to the waterways.

A Worthy Example.—According to the report submitted to the shareholders of the Soutchastmki Co. at a meeting held on March 24th, the net profit earned by the company in 1906 amounted to 521,000 roubles. It was resolved to grant to all officers and employés, from the managing director to the commonest workmen, an extra allowance, representing 35 per cent. of their annual salary, and to distribute a dividend of 20 per cent. to the shareholders.

The European Petroleum Co. Acquires More Land.—The Russian Government has granted permission to the European Petroleum Co. to lease from Mr. I. D. Adamoff a plot of land, situated at Ramany, and having an area of 1,600 square sagenes. The ownership of this plot is disputed by the Government, and they have, therefore, stipulated that, pending the final decision of the ownership question, a strict account is to be kept of the quantities of oil produced on the same, the company undertaking to provide a sum of 780 roubles per annum for the pay of an officer who will keep his account.

Roumanian Railway Transportation Figures.—During the fiscal year ended 31st March, 1906, the Roumanian State railways have transported in tank waggons, 469,639 tons of petroleum products, which yielded a revenue of 2,545,924 francs. This works out at an average of 5·42 francs per ton. The deliveries by rail to the principal ports and frontier stations, were :—Constantza, 191,926 tons ; Constantza Port, 62,961 tons ; Cernavoda, 43,779 tons ; Braila, 18,375 tons ; Braila Docks, 22,843 tons ; Burdujeni, 19,906 tons ; Burdujeni Frontier, 2,300 tons ; Guirgevo, 19,906 tons ; Verciorva, 4,875 tons.

THE PETROLEUM EXPORT AND IMPORT TRADE OF AUSTRIA-HUNGARY.

DETAILS OF TRADE DURING 1906.

The following are the figures of the exports of petroleum products from Austria-Hungary to various countries in 1906 (in tons):—

Destination.	Illuminating Oil.	Benzine.	Other Oils.	Paraffin Wax.	Total. 1906.	Total. 1905.
Germany ..	71,323	7,496	25,908	6,498	111,225	67,501
Hamburg ..	36,034	—	3,741	1,114	40,889	37,655
Switzerland ..	12,285	6,178	5.160	204	23,827	15,041
France	17,035	173	2.496	33	19,737	29,452
Turkey	12,706	3	5,815	140	18,664	27,700
England	15,319	—	2,620	580	18,519	13,097
Italy	1,400	1,111	2,937	457	5,905	5,959
Holland	111	—	5,057	73	5,241	7,845
Belgium	95	51	3,705	205	4,056	4,027
Roumania ..	2,223	1	48	44	2,316	68
Bulgaria	1,669	7	85	20	1,781	2,654
Russia	—	1	19	1,478	1,498	716
Other Countries	618	139	1,010	525	2,292	5,005
Total	170,818	15,160	58,601	11,371	255,950	216,720

The total exports of various products during the year, as compared with those of 1905, were as follows:—

	1906.	1905.
Illuminating Oil	170,818	161,715
Benzine	15,160	8,186
Other Oils	58,601	37,829
Paraffin	11,371	8,990
Total	255,950	216,720

The above figures shew that efforts made by the Galician refiners to develop their export trade have been crowned with a large measure of success, and the increase has been general in all products. The item of 58,601 tons classed as other products consists of—2,683 tons of crude oil, 10,000 tons of refined or semi-refined light oils other than benzine or illuminating oil, and about 45,000 tons of lubricating oils, and about 300 tons of residuals. The increase in the exports of lubricating oils is very satisfactory.

Germany has retained its position as the largest consumer of Galician oil, the exports to that country having nearly doubled; the total exports to Germany include about 20,000 tons of lubricating oil and practically the whole of the crude oil exported from Austria-Hungary.

The progress made by the petroleum export trade during the last 10 years is shewn in the following table:—

	Tons.		Tons.
1897	13,082	1902	43,403
1898	3,062	1903	70,763
1899	24,463	1904	142,116
1900	30,199	1905	216,720
1901	29,459	1906	255,950

The imports of petroleum products into Austria-Hungary during 1906, compared to 1905, were as under (in tons):—

	1906.	1905.
Illuminating Oil	5,078	8,014
Benzine	7	—
Other Oils	29,124	35,397
Paraffin	831	887
Total	35,040	44,298

The quantities imported from the different countries were (in tons):—

	Illuminating Oil.	Benzine.	Other Oils.	Paraffin.	Total. 1906.	Total. 1905.
Roumania ..	1,466	—	14,992	1	16,459	20,709
U.S.A.	2,498	—	10,693	320	13,513	13,917
Russia	355	—	2,684	1	3,040	7,661
Germany ..	644	5	392	255	1,296	1,275
Other Countries	115	2	361	254	732	786
Total ..	5,078	7	29,124	831	35,040	44,298

The exports of ozokerite and ceresin in 1906, compared to 1905, were:—

	1906.	1905.
Ozokerite	2,328	1,614
Ceresin	1,124	832
	3,452	2,446

The bulk of the ozokerite exported went to Germany namely, 1,530 tons; Hamburg follows with 528 tons; France, 83½ tons; Russia, 99½ tons, etc.

The production of ozokerite in Galicia in 1906, compared to 1905, was as under:—

	1906. Tons.	1905. Tons.
Boryslaw	2,205	2,260
Dzwiniacz	260	350
Starunia	210	210
Total	2,675	2,820

It will be observed that in spite of the reduced output of ozokerite in 1906 the exports both of crude ozokerite and ceresin have increased, and together exceeded a value of 6,000,000 kronen.

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BATOUM EXPORT TRADE DURING FEBRUARY

In February the export operations of Batoum were more successful than in January, and notwithstanding the shortness of the month the exports shewed an increase by 200,000 poods. The increase has occurred in the export of kerosene in bulk. A good trade was also done in kerosene distillate. Case oil shipments have declined by 450,000 poods, owing to the stoppage of work at the Mantascheff case oil works after the fire. As soon as these works are restarted, the exports of case oil are bound to increase considerably. In the exports of lubricating oils there was an increase by 160,000 poods.

The following are the figures for February of the arrivals of oils at Batoum from Baku, shipments from Batoum, and stocks on the 1st March (in poods): —

	Arrivals.	Shipments.	Stocks on March 1st.
Refined Kerosene ..	2,509,000	1,660,000	3,904,000
Kerosene Distillate ..	—	705,000	46,000
Solar Oil	33,000	—	301,000
Machine Oil	520,000	563,000	687,000
Spindle Oil	52,000	55,000	77,000
Cylinder Oil	6,000	26,000	25,000
Vaseline Oil	—	54 000	59,000
Lub. Oil Distillate ..	—	—	140,000
Residuals	278,000	44,000	339,000
Total ..	3,398,000	3,101,000	5,578,000

Of the 2,509,000 poods of kerosene delivered from Baku, 217,000 poods came in tank waggons, and the rest was pumped through the pipe line.

It will be observed that solar oil has entirely lost its sale, and deliveries of it to Batoum from Baku have been stopped, and the total stocks, held by four firms, do not exceed 301,000 poods. The total stocks of all products at Batoum is still very small, occupying no more than one-sixth of the total capacity of the storage installations at Batoum. The empty tanks are mostly kerosene tanks, as all the kerosene delivered from Baku is quickly shipped.

The distribution of the exports in February among the different consuming countries shews considerable changes against the normal proportions The largest quantity — namely, 718,000 poods, chiefly kerosene distillate—was shipped to France. England comes next with 499,000 poods. Adding to this the quantity shipped to England in January, we get a total for the two months of only 502,000 poods, which is barely one-quarter of the monthly exports to that country under normal conditions. There was also a serious falling off in the shipments to Belgium and Holland, which did not exceed 367,000 poods. The shipments to Italy increased to 393,000 poods, consisting mainly of kerosene in bulk for the local case factories. To Germany, 392,000 poods were shipped. A cargo of bulk oil of 216,000 poods was shipped to Alexandria, and two bulk cargoes were shipped to Russian home ports, making, together with small lots, 263,000 tons. Shipments of cases and barreled oils to Turkey and the Balkan States amounted to 253,000 poods.

LATEST INFORMATION FROM THE AMERICAN FIELDS.

A NEW HIGH GRADE OIL FIELD.

As briefly recorded upon another page among our American Notes, a new stratum has been struck near Muskogee in the south-eastern part of the Creek Nation, the finding of which is a matter of more than passing importance. The result of the drill in the test well which has been sunk opens another pool of probably considerable extent, but what is perhaps of greater value, the oil found there is of much higher grade than any yet found in commercial quantities in any other portion of the Mid-Continent fields. The operations around Muskogee in the past have not been altogether satisfactory since the wells went to pieces very quickly, the locality, until the present find, having a total production of under 20 barrels per day from its nine wells. About six months ago, a number of residents, including the officials of the Muskogee Refining Co., organised the Syracuse Oil and Gas Co. to prospect near the city, prepared to drill 10 prospect holes on land embracing 2,200 acres. The first well has proved the character of the territory. When a depth of 1,300 feet was reached there was no evidence of oil and the operators became discouraged, while at 300 feet deeper the test was practically abandoned. Just by chance was it decided to drill it a little lower, and then the new sand was tapped. The latest report states that the well has settled down to a production of about 600 barrels per day.

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The Union Oil Company's Panama Pipe Line.

INTERESTING DETAILS OF OPERATIONS AT THE ISTHMUS.

Mr. A. Beeby Thompson, of the firm of Messrs. Thompson and Hunter, of Leadenhall Street, E.C., writing from the Hotel Tivoli, Panama, furnishes the Review with a number of details of the Union Oil Co.'s operations on the Isthmus of Panama. Mr. Thompson points out that the eight-inch pipe line has been laid between Panama on the Pacific side and Colon on the Atlantic side of the Isthmus, along the side of the railway which skirts the canal works. At intervals gate-valves have been inserted in the line to stop the flow of oil should a pipe burst. No expansion joints have been attached to the main, nor is the line buried except in a few positions where it would be specially liable to damage. Where the ground is swampy the pipe is carried on wooden or concrete standards, and owing to the ravages of white ants it is almost certain that the whole of the timber standards will have to be replaced by masonry ones in a short time if breakages are to be avoided. Over very irregular ground in the district of the settlement of Empire the pipe line is supported by masonry uprights. The pipe line has been protected from oxidation by several coatings of paint, a provision very necessary in a climate like that of Panama where the rainy season constitutes eight months in the year. The Canal operations have led to the clearing and burning of much of the jungle, covering the Canal zone, an operation that has much simplified the laying of the line and preserved the health of the employees.

Views along—

At Panama, storage for about 35,000 tons of crude oil has been erected, this capacity being provided by four circular steel reservoirs of a capacity of nearly 9,000 tons each. The tanks are located near the beach upon slightly elevated ground, and they are connected to the point where the boats discharge by an eight-inch pipe line. The point chosen for discharging the cargoes of of oil is at the west side of the Pacific entrance of the Canal, whilst the landing place and pier for ordinary steamers is on the east side. The pumps on the tanker force the oil along the line beneath the Canal to the pump station and storage on the Ankon beach.

The pumping station and boiler house are wooden structures, protected by galvanised iron, with open sides to allow free access of air. There are six water tube boilers for providing steam at a pressure of 150 lbs. per square inch, each fitted with liquid fuel burning apparatus and firebrick baffled furnaces. The main pump is a compound duplex horizontal steam, direct-driven ram pump capable of delivering 10,000 barrels daily against a pressure of 500 lbs. in the line. There is a small auxiliary duplex direct-acting ram pump capable of forcing a small quantity of oil through the pipe line should the large pump fail.

The main has already been tested with water to a pressure of 750 lbs. per square inch and certain defective pipes so revealed have been replaced by others. Only one small cargo of oil has yet been received in Panama, and this lies stored in the Panama tanks at present. Overlooking the works and Pacific Ocean, on slightly elevated ground, are quarters for the pipe line staff, and as all the jungle and scrub has been removed the position is very healthy.

At Colon, at the other end of the pipe, iron storage tanks of a total capacity of about 30,000 tons are now in course of erection near the Atlantic entrance to the Canal. Tankers will enter the old channel dredged by the French Canal Co., and will be far away from the Colon docks where the passenger boats discharge. The Colon tanks are on elevated ground and their erection is being conducted with the aid of pneumatic rivetters and modern labour-saving tools.

By the terms of the concession to the Union Oil Co. of California, the Canal Commissioners must be provided with all the oil they need on the Isthmus at 90 cents a barrel, or say about £1 6s. per ton, and considering that medium quality coal costs on the Isthmus about £2 per ton, and that one ton of Californian oil is equal to at least one and a-half tons of coal, it is strange that no greater haste has been exhibited in the introduction of oil fuel. Every ton of coal replaced by oil fuel should result in a saving of about 14s. per ton, were the oil of the same value as coal, but as its effective value is at least 50 per cent. greater than the coal imported to the Isthmus the actual saving will be more than £1 on each ton of coal replaced. Fully 100,000 tons of coal must

—the Isthmus.

be annually consumed by the Isthmian works and railway at present, consequently the introduction of oil fuel would result in an immediate saving of about £100,000 a year, besides liberating much rolling stock for other purposes. So far as could be seen no preparations were in progress for the immediate utilisation of oil fuel by the locomotives, dredges, excavators, etc., in use or awaiting occupation on the Canal zone.

The 46 miles of line are tapped at intervals by tees and valves where branch feed pipes will be led off to subsidiary storages for local consumption. None of these subsidiary works have yet been commenced, so that it will be some time before liquid fuel is brought into considerable use.

The chief points of fuel consumption will be Culebra, Empire and Matachin, 11, 12 and 17 miles from Panama respectively. The great Culebra cut has already been excavated to a depth of 150 feet, but more than a 100 feet more has to be excavated in depth alone. Fortunately the strata is soft, and can easily be worked with steam-navvies, but nearer Matachin hard sandstones exist which necessitate constant blasting operations before mechanical excavators can be used. The greater part of the fuel will be used in the eight miles from Rio Grande Superior to Matachin.

The great dam at Gatun, seven miles from Colon, will be the next work in point of importance, and immense quantities of fuel will be needed for the excavation and embankments.

Some idea of the extent of the Isthmian operations can be gauged from the fact that there are now 25,000 persons engaged on the works and some 20,000 cubic yards of earth are being daily excavated, and conveyed away in trains and dumped in the neighbouring valleys.

NATURAL GAS IN CANADA.

In a recent report issued by the Canadian Bureau of Mines, the writer points out that the increase which has taken place in the natural gas production of Canada is due to the opening of new pools in the townships of Crowland, Humberstone (the N.W. part) and Wainfleet in Welland county, and also in the townships of Rainham and Walpole, near the village of Selkirk, in the county of Haldimand. From these new gas fields the cities and towns of Niagara Falls, Ont., St. Catharines, Hamilton, Brantford and Galt, are now enjoying the advantages of natural gas for fuel and light. Recent drilling is proving successful in enlarging the productive area of these fields, and further drilling will most likely yet uncover several productive pools at present unknown. The outlook for a continuation of a moderate supply to these towns can therefore be regarded as good, especially when it is considered that the old original field in Humberstone and Bertie townships, Welland county, is still supplying considerable quantities of gas after a continual heavy pull on the wells for more than fifteen years.

In Essex county, the town of Leamington is again getting a supply of natural gas from wells a couple of miles south-east of the town. This gas territory constitutes the south end of the Leamington oil field, which runs from there, over a sharp and narrow fissured fold or break in the underlying strata, for a distance of twenty miles, right across the whole country of Essex in a north and south direction. The small production of oil on the Stony Point road near Comber is on this break, which reminds one of the Findlay break so well described by Orton in the Geological Reports of Ohio.

The other villages and towns of Essex county previously supplied with natural gas from the old Kingsville-Leamington field have now lost the advantages of this clean fuel, and the three main lines which had been laid from the field to Windsor have been picked up and sold.

ROUMANIAN PRODUCTION IN FEBRUARY.

According to official statistics, the production of crude oil at the Roumanian oil fields in February amounted to 87,564 tons, against 83,281 tons in January, 1907, and 55,215 tons in February, 1906. The figure for February, 1907, is incomplete, and about 2,000 tons will have to be added for the output of firms who had not made out their returns, which will bring the total up to about 90,000 tons. This constitutes a record in the history of the Roumanian petroleum industry, and is due almost exclusively to the prolific yield of one of the wells of the Steaua Romana Co. at Campina.

The production of the different fields in February, as compared with January, was as under:—

	February. Tons.	January. Tons.
Prahova District—		
Bustenari	38,245	43,832
Campina-Poiana	22,395	10,956
Moreni	19,513	20,104
Baicoi-Tinta	2,191	3,218
Other Fields	1,115	1,199
Total for Prahova	83,459	79,309
Dambovitza District	2,726	2,524
Buzeu ,, ...	695	767
Bacau ,, ...	684	681
Total	87,564	83,281

The production of the leading firms in February was as under:—

	Tons.
Steaua Romana	37,967
Regatul Roman Co.	14,071
Bustenari Co.	9,722
Romano-American Co.	4,226
International Co.	3,794
Sylva Co.	3,341
Colombia Co.	2,313
C. M. Pleyte and Co.	2,288
Trajan Co.	1,733
Aquila Franco-Romana	1,193
Arnheemsche Petroleum Co.	1,000

Mr. Francis W. Darch, senior partner in the firm of Messrs. Cave and Co., of 20, Eastcheap, London, E.C., has been appointed Commissioner for Deeds for California by the Governor of the State. Mr. Darch, who has a personal knowledge of the State of California, is the solicitor of the following oil companies:—Anglo-California Oil Syndicate, Ltd., the Southern Californian Oil Syndicate, and the Santa Barbara Californian Oil Co., Ltd., and is otherwise interested in the Pacific coast oil trade.

OUR AMERICAN LETTER.

Pittsburg, *April 2nd*, 1907.

Developments in the lower South-west fields of late have not been fruitful of any new or important discoveries. The majority of the wells drilling and starting are confined to the old fields, and their completion attracts but little attention. Interest in field work will revive when a little later the wildcatter will get busy. There has been a good deal of casting around for likely territory, and in some localities leases have been taken with a view to testing during the spring and summer.

In the search for new producing territory it will be necessary to ignore previous tests that proved failures. When there was not so great a scarcity of territory it was conceded that a duster condemned a large block of territory. The old theory has for some years been ignored, and all of the pools discovered during the past year or two were found in territory that had been condemned at some time in the past. Time and again it had been leased, and then followed a dry hole, and it was surrendered as worthless.

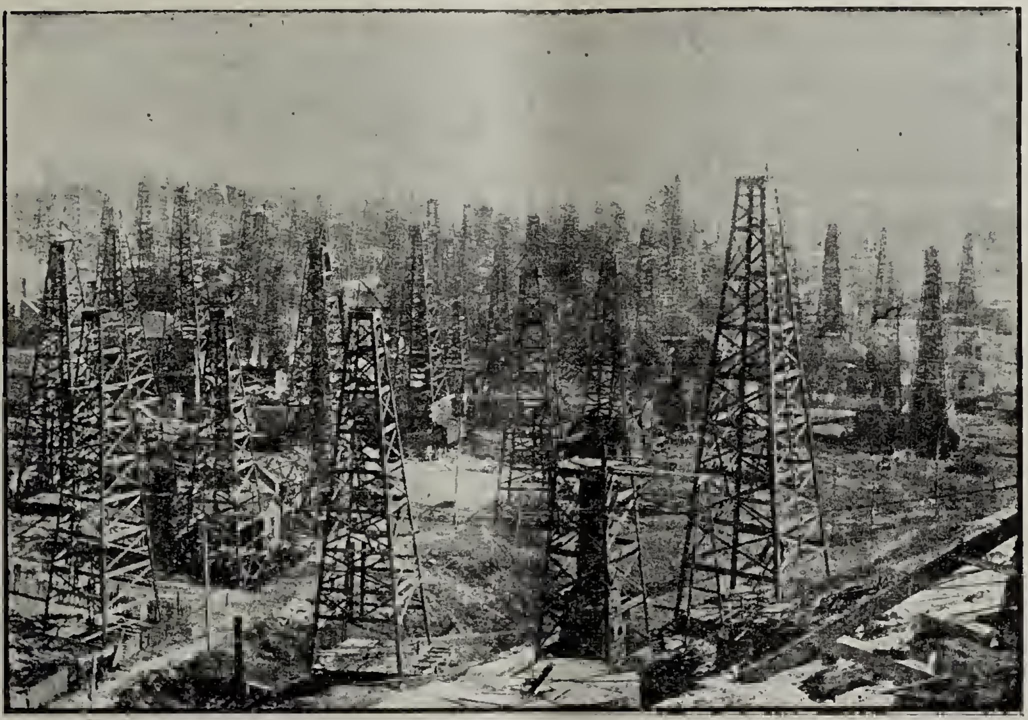
In the light of the vast amount of development work that had been done in the lower South-west and South-eastern Ohio, it is not expected that any large pools remain undeveloped. However, there is still room for many small pools, and it will be many years before the last has been discovered. This has been the history of Butler county down to the present time. Allegheny and Washington counties have had the same experience.

The advance in the market has brought new energy into the business, and nowhere is its influence more noticeable than in the old fields. An operator who visited the Butler county fields during the past week stated that everywhere the old derricks had been patched up with new boards and in many places new derricks had been erected over old holes that had been abandoned during the depression and at the time when producing territory and high grade production was not so scarce. In his opinion, he thought the new production obtained from the old wells would nearly equal that secured from drilling new wells.

In the lower South-west operators are casting about for shallow sand territory, and are willing to take chances where the expense of drilling is not too great. In Tyler, Ritchie, Pleasants and Roane counties, there is new work starting and more contemplated as soon as the roads are in an improved condition. Another week of good weather will make it possible to get machinery and material to the fields when operations will be more active than for some years past.

It is expected that operators will go farther to the south-west, and make a more thorough test of territory than at any time in the past. From Roane county south and south-west, the territory has not been fully tested, and in many localities there is room for large pools. The broken condition of the producing formation has been the most discouraging feature in the past efforts that have been made to locate new pools.

Up until a little more than two years ago Calhoun county was turned down time and again, then the Yellow Creek pool was discovered, and proved very profitable. Roane county was not taken seriously till late last year, and now it promises to be the most active during the remainder of the current year of any in the lower South-west. There has been a large area of territory tested, and is known to be capable of furnishing a large number of small but profitable producers.



A Scene of Activity: A Forest of Derricks.

For some months before the advance in the market, development work had about come to a standstill in the deep sand districts. A few of the large companies continued to drill in a desultory sort of way. The little work done was with a view to protecting leases or testing with a view to surrender if it was found unproductive, rather than continue to pay rental. Recently the smaller companies and individuals have shewn a disposition to drill, and the larger companies are increasing operations.

North of the old Campbell's Run district, in Monongalia county, some very good fourth sand producers have been found, and they have been an incentive for starting considerable new work. Drilling down old wells to the lower formations is still a feature in many of the districts not available for new work.

In the extreme lower South-west there are possibilities in Cabell and Lincoln counties. The early spring months will witness a determined effort to develop a Berea grit pool in the last-named county. Two light but paying producers have been completed, and they have inspired some new work, and more will follow with the return of good roads.

An occasional good producer in the Big Lime district, in Cabell county, continues to keep up interest in that district. One of the best pools discovered during the past six months is the little Berea grit development near the old Congo pool in Hancock county. About 25 wells have been completed, and of that number not more than four have come in dusters. The pool has a production close to 1,000 barrels a day, and with the work now under way completed, should shew an increase. The producing area of the territory is not likely to be much larger than now defined, which does not embrace more than 125 or 150 acres.

Operators on the Ohio side are not making any new discoveries of importance. The Clear Fork district, in Monroe county, is the most active. The late wells are light, as compared with the first completed in that district. It is shallow sand territory, and can be operated at a profit, where nothing better than light pumpers can be expected.

Near Newport, in Washington county, there is some new work starting. During the week a second Keener well was drilled in, and it is quite probable that a pool will be developed. The old shallow sand districts in Washington county have been pretty well drilled over, and it will be necessary to find new pools if the county is to maintain a show of activity.

The representative of a Pittsburg boiler and engine company has just returned from a semi-annual visit to the fields in South-eastern Texas, Kansas and the two territories and Illinois. In Texas, he found greater prosperity than in any year since oil was discovered in the Gulf section. There is more work under way than the average opeartor in the east imagined. In Texas, operators are doing just the reverse of those in the east. Instead of drilling to lower producing formations for new production, they have gone back to the old fields, and are now drilling new wells to the shallow sands.

After the Guffey-Lucas gusher was drilled in and proved the greatest producer that that country has ever known, operators did not pay any attention to the oil that was encountered in the upper sand formations, but drilled as speedily as possible to the same formation as Guffey-Lucas well. In the old Spindle Top field he found 15 or 20 wells drilling and at Humble a greater number. The new wells range from 100 to 300 barrels a day. At Sour Lake, Batson and Saratoga there is a lot of the same kind of work. In South-eastern Texas and Louisiana he thought there was between 125 and 150 wells drilling, In addition to the work in the old fields there is a large amount of wildcatting.

The market price of Texas crude is now higher than at any time in the past. The average is about 90 cents a barrel, but in some instances contracts for future delivery are made at $1·00 a barrel. The demand for fuel oil is steadily increasing.

In the Mid-Continent field great activity is promised. In both Territories there are vast areas of undeveloped land. With transportation facilities equal to taking care of all of the oil, drilling will be very active.

In the Illinois field there will be a great increase in production for a time, and once the wells are put to producing, the staying qualities of the field can be determined.

AMERICAN NOTES

From Manitoulin Island.—With the advent of better weather, developments are proceeding on Manitoulin Island rapidly, and so far several new companies are already on the ground ready to drill.

Crude Oil Advances.—Two more advances have been made in the prices paid for crude oil by the Standard Oil Co., and the result is that much activity now prevails in the various fields from which the Standard draw their principal supplies.

The Fenelton Oil Field.—The Fenelton oil field in Butler county, is now attracting considerable attention as a consequence of a very prolific gusher having been brought in. It may be remembered that in the same locality a few weeks ago two other very good wells were brought in.

Another Pipe Line.—A communication from Findlay, Ohio, states that the Buckeye Pipe Line Co. has now started work upon its new pipe line from Adgate Station, near Lima, to the pumping station south of Cyget in Wood county. This work has been delayed a considerable time owing to the non-arrival of the necessary pipe.

A New Pool in Brooke County.—A new Berea Grit pool in Brooke county is now assured, four producing wells already having been completed with a total production of 200 barrels per day. It is a fact worthy of note at this time that Brooke and Hancock counties should have been overlooked when the rush to West Virginia began twelve years ago.

A Deep Sand at Muskogee.—Operators throughout Indian Territory have almost gone wild owing to a deep and prolific stratum having been struck near Muskogee. The well is 1,740 feet deep and in the first hour is credited with as many barrels. Operators from the Mid-Continent regions have flocked to the new development, and every large company is now represented there.

A Disappointing Field.—The Troupsburg gas field, of which so much was expected, has proved a failure, and for many weeks past there has not been enough gas produced to be used at the wells; consequently the operators have had to fall back on wood. The abandonment of the field will be deplored on all hands, for many localities looked to it for a solution of future light and fuel troubles.

Western Oil for Texas.—The first shipment of western oil for Texas took place at the end of March, when the Prairie Oil and Gas Co. loaded 5,000 barrels of what are now to be daily shipments from Jenks to the Security Oil Co.'s refinery at Beaumont. Jenks is about 10 miles south of Tulsa, I.T. The Security Co.'s refinery at Beaumont has fifty 600-barrel stills, and it needs the Oklahoma crude oil to make good the decreasing supply of Texas heavy oil.

Mid-Continent Statistics.—During March the three pipe line companies in the Mid-Continent fields, the refineries, and the fuel companies altogether handled 3,290,316 barrels of crude in Oklahoma and Kansas, or a daily average of 106,139 barrels. Estimating the surplus in the Glenn pool at 28,000 barrels a day, and in the shallow sand district of the Cherokee Nation at 4,000 barrels daily, the production of the entire field may be put down at 138,000 barrels daily with the pipe line companies gaining on the production. Of the 50,000 barrels which is daily being removed from the Glenn pool, the Prairie Oil and Gas Co. is responsible for 38,000 barrels of this. As may be imagined, the producers are now pushing forward developments.

The Volant Oil and Gas Company.—Mr. John M. Patterson, a well-known oilman, has combined his Mercer county holdings with other producing property he holds in South-eastern Ohio and organised a company under the laws of the State of West Virginia. The title of the company is The Volant Oil and Gas Co. and in the future its operations will be conducted under that name. The company has very large holdings in Mercer county and has, up to the present time, 32 completed wells, all producers. The company keeps four strings of tools running in the field and has room for more than 100 locations, of which 60 have been made. It is shallow sand territory and the wells can be readily drilled with a machine.

The American Oil Market.

New York, Week ended April 13th.

Nothing of special interest covering the older oil fields was received, and reports continued to note few wells and few completions in the lower Southwest. In Hancock county, the Congo pool continues to bring in more wells than any other districts. In most instances operators are developing the territory judiciously, and are confining themselves in proximity to producing limits. In the Illinois field operators are preparing for active development work, says the *Oil, Paint and Drug Reporter*, and if the weather continues favourable, reports are expected will become interesting. The high market for oil continues to stimulate the demand for new producing territory and operators appear to be inclined to take long chances in sections which have been condemned, while the call for settled production in the oil fields has increased wonderfully. Canada's new oil fields are attracting considerable attention, and a large amount of development work is promised in that field. The wildcatter in the Indiana and Illinois fields will again spring up serenely. For several months the average daily output of oil wells has been considerably below the average amount required for consumption of their products. The constant drawing upon the accumulated stocks above ground has culminated in the recent sharp rises in prices of crude oil. The Mexican oil fields are spreading and developing, but same, according to reports, will have no bearing upon the oil market for some years to come. Reports from the Mid-Continent fields note active operations in practically every district. During March the runs and shipments in the above field were large and eclipsed all previous records. The pipe line runs were over 90,000 barrels and shipments over 63,000 barrels a day. The total net pipe line runs from March 1st to 31st, 1907, amounted to 2,795,969 barrels, and deliveries, 1,965,586 barrels, leaving 830,382 barrels placed into tankage. Net stocks, tanks and pipes on April 1st were 23,819,233 barrels.

REFINED AND PRODUCTS.—The local market was firm on continued favourable reports from the producing districts. Advices from Cleveland O., dated April 8th, noted that the Standard Oil Co. on that date advanced quotations on all grades of refined oil ½c. per gallon. The new prices are as follows: Ohio State test 10; water white, Ohio State test, 10½; headlight, 175 degrees, 11½; Eocene, 11½. Later on April 11th, reports from Cleveland O., noted another advance of 1c. per gallon on common grades of gasolene, announced by the Standard Oil Co. The export demand for refined continued good. There was a steady demand from the home trade. Further advances in prices of refined and and products are looked for. The demand for refined for export was active, and sales in the local market amounted to a good volume.

The price for barrelled oil for export closed unchanged, and the market is quoted at 8·20c. for New York loading, and 8·15c. for Philadelphia loading. The total engagements during the week in the local market amounted to over 198,125 barrels. The principal foreign markets closed firm. Freight rates closed firm at 2s. 1½d. @ 2s. 3d. hence to London, and 2s. 3d. @ 2s. 7½d. to Continental ports, as to port and vessel.

Cases for export were in fair request, and sales of over 140,000 cases were reported. The price of plain tops closed unchanged at 10·65c. Freight rates were firm and unchanged.

Crude for export was firm, but no sales were reported. Pennsylvania crude closed at 8·20c. in barrels.

Naphthas were firm, and sales of 9,150 barrels for export were reported.

CLOSING QUOTATIONS.

CRUDE.	Week ended Mar. 30. 1907.	April 13. 1907.
Pennsylvania crude in bbls.	$7·75	$8·20
Pennsylvania crude in bulk	4·60	4·75
Residuum, bbls. forexport	6@6½	6@6½

CRUDE AT THE WELLS.

The quotations for oil represented by credit balances were ;—

	Week ended April 13. 1906.	Ap.il 13. 1907.
Tiona	1·71	1·78
Pennsylvania	1·16	1·78
North Lima	0·96	0·94
South Lima	0·91	0·89
Indiana	0·91	0·89
CANADIAN OIL:		
Petrolia	1·37	1·34

REFINED—FOR EXPORT.

		Week ended April 13. S.W.	W.W.
Barrels, cargo	per gal.	$8·20	@10 20
Philadelphia		8·15	@10·15
Bulk, New York		4·75	@ 6·75
Bulk, Philadelphia		4·70	@ 6·70
Cases, New York		10·65	@13 65
Cases, Philadelphia		10·60	@13·60

REFINED IN CASES—110 FIRE TEST.

	Week ended Mar. 30. 1907.	April 13. 1907.
3,000 to 10,000	10·40	10·80
1,000 to 3,000	10·45	10·85

REFINED—JOBBING LOTS.

In barrels, pkgs. included.

		Week ended Mar. 30.	April 13.
120 fire test, S.W.	in barrels	12	12
130 fire test, S.W.		12½	12½
150 fire test, W.W.		13½	13½
In bulk from tanks		10	10
300 fire test		13¼@14	13¼@14

NAPHTHA AND GASOLENE.

	Week ended Mar. 30.	April 13.
Naphtha, crude, car. lots, 68 @ 72 deg.	—	—
Gasolene, 86 deg.	23 00	24·00

PENNSYLVANIAN OIL RUNS from April 5th to April 11th were:—April 5th, 154,629; April 6th and 7th, 247,165; April 8th, 129,292; April 9th, 140,960; April 10th, 179,029; April 11th, 150,850. For the month of March, 2,911,685.

THE DELIVERIES OF PENNSYLVANIA OIL for the same dates were:—176,127; 293,506; 153,013; 204,465; 159,647; 130,870. For the month of Mar., 4,980,733.

CHARTERS FOR THE WEEK.

The total charters for refined, crude, naphtha, etc., in bulk, barrels and cases, during the week ended April 12th and from Jan. 1st, were as follows:—

	Week.	Year.	1906.
Refined, barrels and bulk	238,000	4,117,800	3,150,100
Refined, cases	140,210	4,479,910	4,249,000
Crude, barrels and bulk	350	188,750	517,900
Crude, cases	—	—	187,000
Naphtha, barrels	44,339	153,029	112,800
Residuum, barrels	3,750	144,350	288,600
Lubricating, barrels	—	—	106,900
Total, barrels cde. eq.	106,824	8,195,926	7,044,002

CLEARANCES FOR THE WEEK.

During the week ended April 12th, and since Jan. 1 the clearances of petroleum, in gallons, from the port of New York, were as follows:—

	Week.	Year.	1906.
Refined	14,898,480	139,463,810	137,098,040
Crude	—	787,435	225,400
Naphtha	56,890	2,266,920	4,871,500
Residuum	3,200	156,087	—

EXPORT STATISTICS.

The total exports from the port of New York and from the United States have been:—

	Gallons.
From New York, week ended April 12	19,865,253
Total from New York, from Jan. 1st, 1907	192,458,934
Same period last year	183,039,467
Increase	9,419,467
From United States, week ended April 12th	24,271,166
Total from United States, since Jan. 1, 1997	335,679,134
Same period last year	334,006,143
Increase	1,672,991

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The “Review” Shipping List.

April 26, 1907.

(*The following abbreviations are used in this table:*—L. Left; P. Passed; Arr. Arrived; Sp. Spoken; Tr. Trading.)

Vessel.	From.	For.	Latest Date and Position
ALICE ISABELLE	Philadelphia	Sables d'Olonne	Arr. April 18
ALCHYMIST	Havre	Salzaete	Arr. Flushing, April 7
ALEMBIC	New York	—	L. Mar. 23
AMERICAN	New York	Coatzacoa Coast	Arr. Mar. 20
APPALACHEE	San Francisco & Shanghai	Canton	At Hankow, Mar. 20
APSCHERON	Batoum	St. Louis (Rhone)	P. Constant'ple, April 16
ARAL	Tyne	Philadelphia	Arr April 16
ARAS	Hull	Tyne	L. April 23
ARGYLL	—	—	Coasting U.S. (Pacific)
ASTRAKHAN	Hamburg & Tyne	Philadelphia	Arr. April 21
ATLAS	—	—	Coasting U.S. (Pacific)
AUGUST KORFF	Manchester	Philadelphia	P. Eastham, April 22
AUREOLE	New York	Oporto	L. April 12
AZOV	—	—	Trading on W.C. of South Amca.
BAKU STANDARD	Kustendje	Bordeaux	L. Constan'ple, April 16
BALAKANI	Kustendje	London	Arr. April 20
BATOUM	Tyne	—	At Singapoor, about April 22
BAYONNE	Savona	Messina	L. April 16
BEACON LIGHT	Port Arthur (Texas)	London	L. Norfork (Va.), April 13
BEME	Bombay	Rangoon	L. Mar. 25
BLOOMFIELD	Blyth	New York	Arr. April 19
BORJOM	Alexandria	Batoum	In Dardanelles, Mar. 25
BRILLIANT	Philadelphia	Copenhagen	P. Elsinore, April 22
BROADMAYNE	Port Arthur (Texas)	Liverpool & Manchester	Arr. April 2
BULLMOUTH	Chingkiang	—	L. April 22
BULYSSES	Soesoe	Thameshaven	L. April 22 Bl'xen
BURGERMEISTER PETERSEN	Philadelphia	Stockholm	P. Delaware Break, April 12
CADAGUA (Now Augusta)	Cardiff	Havana	In Mumbles Is Roads, April 12
CALCUTTA	San Francisco	Shanghai	Arr. Mar. 25
CARDIUM	Blexen	Cardiff	Off the Wight, April 23
CATANIA	Port Harford	San Francisco	Arr. April 3
CAUCASIAN	Hamburg	New York	Arr. April 21
CHARLOIS	Philadelphia	Rotterdam	P. Del. Break, April 12
CHESAPEAKE	Calcutta	—	Off Perim, April 12
CHESTER	Philadelphia	Antwerp	P. Del. Break., April 12
CIRCASIAN PRINCE	—	—	Trading on W. C. of South Amca.
CLAM	Penang	—	At Singapore, April 16
COWRIE	Balekpappan	—	L. April 7
COL. E. L. DRAKE	Sabine Pass	New York	P. Diamond Shls., Mar. 4
CYMBELINE	Penarth	Batoum	P. Oitavos, April 17
CZAR NICOLAI II.	Batoum	Hamburg	P. Constant'ple, April 17
DAGHESTAN	Port Arthur (Texas)	Genoa	L. Newport News, April 20
DELAWARE	Kustendje	Port Said	Arr. April 22-23
DEUTSCHLAND	Rotterdam	New York	Arr. April 21
DIAMANT	Hamburg	New York	P. Dunnet Head, April 17
ELAX	Rotterdam	Philadelphia	P. Lizard, April 9
ELSIE MARIE	Amsterdam	New York	P. Dover, April 24
ENERGIE	Philadelphia	Hamburg	Arr. April 13
ERIVAN	Hamburg	Tyne and Batoum	L. April 23
ETELKA	Blaye	Philadelphia	Arr. April 15
EUPLECTELA	Manchester	Philadelphia	Arr. April 15
EXCELSIOR	New York	Hamburg	L. April 10
EZIO	—	—	Coasting Peru
FRANCE MARIE	Philadelphia	Marseilles	L. April 19
GEESTEMUNDE	Tyne	New York	Arr. April 22
GENESSE	Manchester	New Orleans	Arr. April 22
GEORGIAN PRINCE	Havana	Philadelphia	P. Del. Break, April 12
GOLDMOUTH	Rotterdam	Aroe Bay	At Port Said, April 2-3
GUT HEIL	Stettin	Philadelphia	P. Butt of Lewis, April 12
HAINAUT	Alexandria	Kymassi	L. Volo, April 23
HELIOS	Nordenham	Philadelphia	P. Dunnet Head, April 24
HOTHAM NEWTON	Antwerp	Middlesbro'	Arr. April 6
HOUSATONIC	Avonmouth	Tyne	Arr. April 14
IMPERIAL	—	—	Tr. on Lakes btn. U.S. and Can.
JOANNIS COUTZIS	Batoum	London	L. Gibraltar, April 17
J. B. AUG. KESSLER	Batoum	—	P. Aden, April 16
JAMES BRAND	Tyne	Philadelphia	Arr. April 9
KURA	Tyne	New. York	Arr. April 22
LA CAMPINE	Philadelphia	Antwerp	Arr. April 21
LA FLANDRE	Ghent	Philadelphia	Off I. of W., April 20
LA HESBAYE	Batoum	Antwerp	Arr. Apirl 24
LA MADELEINE	Rouen	Barcelona and Algiers	At Barcelona, April 17
LA VIGUESA	Seville	Philadelphia	L. Mar. 20
LACKAWANNA	Tyne	Kustendje	Off the Wight, April 24
LANSING	Astoria	San Francisco	Arr. Mar. 14
LE COQ	Rouen	Philadelphia	Arr. April 18
LOUTSCH	Batoum	Dunkirk	L. Constant'ple, April 19
LUCERNA	Tyne	Philadelphia	Arr. Aprtl 21
LUCIFER	New York	Dublin and Belfast	Sp. Apr. 12, 40-56 N., 57-36 W.
LUCIGEN (Now Cuyalogo)	Philadelphia	Liverpool	Arr. April 13
LUCILINE	Rouen	Philadelphia	Arr. April 18
LUMEN	Batoum	Hull	P. Gibraltar, April 23
LUX	Rouen	Philadelphia	Arr. April 10
MANHATTAN	Batoum	Lisbon	Arr. April 9
MANNHEIM	Tyne	Philadelphia	P. Dunnet Head, April 19
MARGARETHA	Nordenham	Kustendje	L. Corunna, April 19
MAVERICK	San Diego	San Francisco	Arr. Feb. 20
METEOR	Batoum	Vladivostock	At Port Said, April 17–18
MEXICAN PRINCE	Liverpool	Cuba	L. April 9
MIRA	Penarth	Kustendje	P. Sagres, April 16
MUREX	Shanghai	—	L April 10
NARRAGANSETT	Tyne	New York	P. Dunnet Head, April 15
NERITE	—	—	Tr. in China Seas
NEW YORK	New York	Southampton	Arr. April 21
OCEAN	Batoum	Antwerp	P. Dungeness, April 24
OILFIELD	Philadelphia	Cette	Arr. April 20
ORANJE PRINCE	Flushing	Tyne	Arr. April 19
ORIFLAMME	Rouen	Philadelphia	L. April 20
OSCEOLA	Tampa	New Orleans	Arr. April 8
OTTAWA	Philadelphia	Tampico	P. Reedy Island, Mar. 30
OURAL	Batoum	Antwerp	P. Finisterre, April 24
PALEMBANG	Singapore	Calcutta	Arr. April 2
PAULA	Hamburg	Philadelphia	P. Dunnet Head, April 18
PECTAN	London and Emden	Galveston	P. Lizard, April 21
PENNOIL	Tyne	Philadelphia	Arr. April 14
PERLAK	Calcutta	Aroe Bay	L. Mar. 20.
PHOEBUS	Hamburg & Tyne	New York	Arr. April 21

Vessel.	From.	For.	Latest Date and Position.
PINNA	Hamburg	Tyne	Arr. Mar. 12
POTOMAC	Batoum	London	Off the Wight, April 24
PROMETHEUS	Rotterdam	New York	P. Lizard, April 18
PRUDENTIA	Rouen	Tyne	Arr. April 18
QUEVILLY	Philadelphia	Rouen	P. Del. Break., April 12
RION	Batoum	London	P. Gibraltar, April 22–23
ROCK LIGHT	Rotterdam	New York	P. Lizard, April 4
ROSSIJA	Leghorn	Boua	L. April 9
ROTTERDAM	Tyne	Baltimore	P. Dunnet Head, April 20
RUSSIAN PRINCE	Havana	New York	Arr. April 12
SALAHADJI	—	—	Tr. Sts. Settlem'ts and Java Seas
SAXOLEINE	Tyne	Philadelphia	Arr. April 21
SEMINOLE	Shanghai	San Francisco	Arr. Mar. 26
SILVERLIP	Singapore	—	L. Port Said, April 18
SINGU	—	—	Tr. in East Indies
SNOWFLAKE	Cuba	London	L. April 19
SOPHIE	Malta	Kustendje	L. April 19
SPONDILUS	Singapore	—	P. Perim, April 22
STANDARD	Stettin & Tyne	Philadelphia	Arr. April 19
STROMBUS	Calcutta	—	L. April 20
SURAM	London	Blyth	Arr. Mar. 14
SUWANEE	London	Philadelphia	P. Scilly, April 10
SVIET	Batoum	Odessa	L. April 2
TELENA	Cardiff	Constant'ple	P. Sagres, April 14
TEREK	London	Batoum	Off Ushant, April 22
TIFLIS	Barcelona	Batoum	Arr. April 20
TIOGA	Sunderland	New Orleans	Arr. April 24
TONAWANDA	Hankow	San Francisco	Arr. April 11
TROCAS	Yokohama	—	L. April 21
TURBO	Batoum	Hamburg	P. Sagres, April 20
TUSCARORA	San Francisco	Calcutta	Arr. about April 22
TWINGONE	Rangoon	Calcutta	L. April 15
VEDRA	Hamburg	Tyne	Arr. Mar. 30
VILLE DE DIEPPE	—	—	In Port Havre, April 17
VILLE DE DOUAI (Now Edward Dawson)	Middlesboro	Ibrail	L. Constanti'le, April 3
VOLUTE	Calcutta	—	L. April 19
WASHINGTON	Bombay	Bengkalis	Arr. April 16
WEEHAWKEN	Liverpool	New York	P. Fastnet, April 10
WILLKOMMEN	Philadelphia	Rotterdam	L. April 20
WINNEBAGO	Shanghai	San Francisco	At Muroran, April 10

Latest Market Intelligence.

LONDON OIL MARKET.

Supplied by Messrs. Benjamin & Gee, 31, St. Mary Axe, E.C.

April 26th, 1907.

The Importers price for refined petroleum remains unaltered as follows:—Russian and Roumanian, 6¼d.-6⅜d.; American, 6¾d.-6⅞d.; Water White, 7¾d.-7⅞d.

LUBRICATING OILS

The present prices for these are:—

American pale, £7 7s. 6d. to £11.
American dark cylinder, from £8 5s.
American filtered cylinder, from £11 2s. 6d.
Shellene, £5.
No. 1 Russian, £10 7s. 6d.

TURPENTINE.

American Turpentine remains very firm and shews a slight increase since our last report. Spot is quoted 51s. 9d. to 51s. 10½d.; May to June, 48s.; July to December, 46s.

LIVERPOOL OIL MARKET.

April 25th.

Refined oils are quiet, and sellers quote 6⅛d. for Russian, Galician or Roumanian; and 6⅝d. to 7⅝d. per gallon for American.

Petroleum Spirit continues at 1s. 0½d. to 1s. 3d. per gallon for American deodorised, according to quality on the spot.

LATEST AMERICAN PRICES.

New York, April 25th.

Refined, in cases, is steady at 10·65; Standard White, 8·20; Credit balances, 1·78c.

Philadelphia, April 25th.

Standard White is still quoted at 8·15.

RUSSIA.

Baku, April 20th.

The Baku oil market is firm. Light crude oil, spot, 27½ copecs per pood; residuals, in ships, delivery during navigation, 29¼; kerosene, in waggons, 32 copecs.

BELGIUM.

Antwerp, April 19th.

The petroleum market is unchanged. Price of Standard White, spot, 20¼ francs per 100 kilos.

FRANCE.

Paris, April 20th.

Illuminating oil is quoted in bulk, in whole tank waggons, 23 francs per hectolitre; spirit, 31·25 francs per hectolitre. Special white oil, 31 francs per hectolitre.

GERMANY.

Hamburg, April 19th.

The kerosene market is firm. The price of American Standard White is 6·80 marks per 50 kilos, Russian, 6·55 marks.

ROUMANIA.

April 16th.

	Francs.
Crude oil from different fields, including pipe line charges, per 100 kgs.	4·00-4·20
Refined oil, exclusive of taxes	10·00- —
Motor benzine, including taxes	16·00-18·00
Benzine, doubly refined	24·00-25·00
Residuals in tank waggons, at refinery	3·50-3·60
Paraffin	120·00-125·00
Lubricating Oils –	
Agricultural	30-32
Prime	35-37
Extra	40-42
Royal	45-46

In barrels free on rail including octro tax of 12 fcs. per 100 kilos

Prices for Export.

Refined oil in tank waggons, per 100 kgs.	8·50- —
Benzine, sp. gr. 0·710-0·715	21·00-22·00
„ sp. gr. 0·720-0·725	19·00-20·00
„ sp. gr. 0·730-0·740	13·00-14·00
„ sp. gr. 0·745-0·755	9·00-10·00

INDIA.

Bombay, March 29th.

Petroleum is steady.

Standard Oil Co., of New York.

Current rates are:—

American, "Snowflake," 150 deg.	Rs. 6	0	2
„ Chester, 125 deg.	4	8	2
„ Monkey Brand, 125 deg.	4	2	2
„ Bulk, 125 deg. (in local made tins)	3	10	0
„ „ 125 deg. (8 Imperial gallons)	3	0	0
„ "White Camelia" brand, 125 deg.	No stock.		

The Asiatic Petroleum Company, Limited.

Current rates are:—

"Swan" Brand oil, in tins, per pair	3	4	0
Sumatra "Rising Sun," bulk, per unit	3	0	0
„ „ tins, per pair	3	10	0
Silverlight cases, per case	4	8	0
Sumatra, "Anchor" per case	4	14	0

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IMPORTS of PETROLEUM into UNITED KINGDOM

Specially prepared for this Journal by the Custom House.

FOR THE WEEK ENDED 15TH APRIL, 1907—

Date.	Port and Importers.	Description.	No. of Gals.	Port Whence.
April.	London—			
9	Schliemans Oil Co... ..	Lub.	6,500	Reval
9	B. Jacob and Sons	,,	2,370	Philadel.
10	Union Lighterage Co. ..	,,	1,070	,,
10	Fielder, Hickman and Co...	,,	2,360	New York
10	R. Park and Co.	,,	240	Marseilles
11	,, ..	,,	240	,,
11	Anglo-American Oil Co. ..		18,800	Philadel.
11	Argo Steamship Co. ..		250	Bremen
12	J. Owen	Tar oil	2,250	Rotterdam
12	Consolidated Pet Co. (Terek)	Lamp	1,420,900	Batoum
12	A. Brown and Co.	..	4,000	Philadel.
12	Lubricating & Fuel Oils, Ld.	Lub.	15,990	,,
12	Anglo-American Oil Co. ..	,,	20,000	New York
12	G. W. Sheldon and Co. ..	Lub.Gr.	1,140	,,
13	London and India Dock Co.	Lub.	2,280	,,
13	Schlieman's Oil Co. ..	,,	3,130	Philadel.
13	British Petroleum Co. (Aras)	Lamp	838,080	Kustendji
13	T. H. Lee	Lub.Gr.	370	Hamburg
13	Lubricating & Fuel Oils, Ld.	Lub.	15,990	,,
13	Produce Brokers' Co. ..	,,	3,600	Antwerp
13	Page, Son and East.. ..	,,	2,720	,,
13	Mordaunt Bros.	,,	15,800	New York
	Liverpool—			
9	Liverpool Storage Co. ..	,,	5,360	,,
9	Geo. B. Taylor	,,	2,000	Reval
9	C. C. Wakefield and Co. ..	,,	1,480	Antwerp
10	Stockdale and Doel	,,	4,800	Boston
13	Vacuum Oil Co.	,,	26,360	New York
15	Pickford's, Ltd.	L.Paste	240	,,
15	G. B. Taylor	Lub.	95,000	,,
15	Anglo-American Oil Co. (Lucigen)	Lamp	1,664,570	Philadel.
15	Meade-King, Robinson & Co.	Spirit	57,570	Rotterdam
	Bristol—			
9	H. R. James and Sons ..	M.Colza	600	New York
9	,, ...	Lub.	1,400	,,
9	W. Smith and Co.	,,	22,400	,,
9	Anglo-American Oil Co. (Housatonic)	Lamp	1,120,990	Philadel.
9	,, ,,	Gas	199,690	,,
11	,, (August Korff)	M.Colza	112,130	,,
11	,, ,,	Lub.	172,700	,,
11	W. Smith and Co.	,,	32,320	New York
11	,, ...	Lamp	800	,,
11	H. R. James and Sons ..	Lub.	29,000	,,
11	,, ..	M Colza	4,800	,,
	Cardiff—			
11	Homelight Oil Co. .. .. (Cymbeline)	Lamp	567,000	Batoum
April.	Goole—			
13	Goole Steamship Co. ..	Lub.	120	Hamburg
13	,, ..	,,	910	Antwerp
	Grimsby—			
13	J. Sutcliffe and Sons ..	,,	810	,,
	Hull—			
9	W. Gilyott and Co... ..	,,	72,240	New York
9	Hull & Neth. Steamship Co.	Tar oil	2,600	Rotterdam
9	W. Moran and Co.	Crude	120	Riga
9	Wilsons and N.E. Railway Shipping Co.	Lub.	240	Hamburg
9	,, ,,	,,	4,040	Antwerp
11	,, ,,	,,	520	Hamburg
15	,, ,,	,,	1,440	Riga
15	,, ,,	,,	120	Antwerp
15	,, ,,	,,	7,200	New York
15	,, ,,	,,	10,000	Hamburg
	Manchester—			
9	George B. Taylor	,,	80,600	Philadel.
9	Crew, Levick and Co. ..	,,	8,540	,,
9	Liverpool Storage Co. ..	,,	9,200	,,
10	Meade-King, Robinson & Co.	,,	27,600	,,
10	,, ,,	Lamp	4,800	,,
11	,, ,,	M.Colza	2,400	New York
11	Lamport and Holt	Lub.	800	,,
11	Bramwell, Fern and Co. ..	,,	800	,,
11	Geo. B. Taylor	,,	145,680	,,
11	Liverpool Storage Co. ..	,,	10,560	,,
11	Diamond Lubricating Co.	,,	2,400	,,
11	Anglo-American Oil Co. (August Korff)	Lamp	533,050	Philadel.
11	,, ,,	Gas	173,980	,,
11	,, ,,	Lub.	367,170	,,
11	W. Hodgson and Co. ..	,,	850	Hamburg
	Newcastle—			
9	Tyne-Tees S.S. Co. ..	,,	200	,,
9	,, ..	,,	2,000	Antwerp
	Swansea—			
12	Burgess and Co.	L. Paste	260	Hamburg
	Glasgow—			
15	Anchor Line	Lub.	76,870	New York
	Leith—			
10	J. Currie and Co.	,,	520	Bremen
11	,, ...	,,	2,880	Hamburg
11	,, ...	,,	530	,,
11	W. Graham-Yooll and Co...	Lamp	3,360	,,
11	,, ...	,,	4,360	,,
	Total for Week ..	..	8,065,060	

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FOR THE WEEK ENDED APRIL 22ND, 1907—

Date	Port and Importers.	Description.	No. of Galls.	Port Whence.
April	London—			
16	Jameson and Palmer	Lub.	3,620	New York
16	Scott's Wharf	,,	8,500	,,
16	Produce Brokers	,,	4,800	,,
16	Fielder, Hickman and Co.	,,	7,160	,,
16	Anglo-American Oil Co.	,,	67,920	,,
16	Bowring Petroleum Co.	,,	8,500	Philadel.
16	E. J. Wilkinshaw	,,	10,000	,,
16	A. Brown and Co.	,,	3,600	,,
16	Lub. and Fuel Oils, Ltd.	,,	4,500	Hamburg
16	London & India Docks Co.	,,	800	,,
17	International Transport Co.	,,	1,390	Antwerp
17	London and India Dock Co.	,,	4,400	New York
17	G. and H. Green	,,	3,310	,,
17	Scott's Wharf	,,	120	,,
18	Asiatic Petroleum Co. (Bulysses)	Benzine	1,299,840	Pulo Samboe
18	British Petroleum Co. (Balakani)	Gas	898,100	Kustendje
18	,, ,,	Lamp	475,200	,,
18	London and India Docks Co.	Lub.	520	Hamburg
18	Page, Son and East	,,	290	Antwerp
19	Lubricating & Fuel Oils, Ld.	,,	10,250	Hamburg
19	Worthington and Boler	,,	5,600	Philadel.
20	Anglo-American Oil Co. (Potomac)	Lamp	1,289,830	Batoum
20	London and India Docks Co.	Lub.	5,580	Hamburg
20	H. Finkler and Co.	Resid.	9,810	Trieste
22	Livett Frank and Sons	Lub.	1,080	Philadel.
22	Goudrand Freres	,,	2,640	,,
22	Worthington and Boler	,,	600	,,
22	Anglo-American Oil Co.	Lamp	20,000	,,
22	Mordaunt Bros.	Lub.	10,300	New York
22	G. W. Sheldon and Co.	,,	290	,,
22	Page, Son and East	,,	920	Antwerp
	Liverpool—			
17	C. C. Wakefield and Co.	Lub. Gr.	2,480	,,
17	Pickfords	L. Paste	360	Hamburg
17	W. B. Dick and Co.	Lub.	20,160	Philadel.
17	Crew, Levick and Co.	,,	17,620	,,
18	Meade-King, Robinson & Co.	,,	2,400	,,
18	Geo. B. Taylor	Lub. Gr.	8,000	,,
19	Pickford's	Lub.	420	New York
19	Meade-King, Robinson & Co.	Resid.	8,000	Trieste
19	,,	Lub.	3,010	Baltimore
20	Geo. B. Taylor	,,	10,290	New York
22	,,	,,	76,760	,,
22	A. Hopps and Son	,,	5,960	,,
22	Liverpool Storage Co.	,,	3,200	,,
22	W. B. Dick and Co.	,,	43,520	,,
22	Railton, Campbell & Crawford	,,	400	New York
22	Valvoline Oil Co.	,,	11,890	,,
22	W. Gibson and Sons	Lamp	4,100	Boston
22	C. W. Field and Co.	Lub.	400	Antwerp
	Bristol—			
16	Pickford's, Ltd.	,,	1,000	New York
18	,,	,,	2,360	Hamburg
19	E. Stock and Sons	,,	2,000	,,
April.	Goole—			
22	Lanc. and York. Ry. Co.	Lub.	600	Antwerp
	Hull—			
16	Wilsons and N.E. Railway Shipping Co.	,,	480	New York
18	,, ,,	Naphtha	1,800	Reval
19	,, ,,	Lub.	32,840	New York
19	,, ,,	,,	2,000	Antwerp
19	,, ,,	,,	4,120	,,
20	T. Meredith, Roberts & Co.	,,	250	,,
	Manchester—			
18	J. T. Fletcher and Co.	,,	820	,,
18	George B. Taylor	,,	210	Hamburg
18	Meade-King, Robinson & Co.	,,	10,000	,,
19	,,	,,	20,000	,,
	Middlesbro'—			
16	E. Harris and Co.	,,	1,480	Antwerp
	Newcastle—			
18	Tyne-Tees Steamship Co.	,,	1,280	Hamburg
	Aberdeen—			
22	J. Cook and Sons	,,	1,000	Riga
	Dundee—			
16	A. B. Fleming and Co.	,,	3,960	,,
	Glasgow—			
16	Anchor Line	M.Colza	600	New York
16	,,	Lub.	77,600	,,
18	,,	Lub. Gr.	3,000	,,
18	,,	M.Colza	7,000	,,
18	J. D. Smellie	Spirit	10,000	Rotterdam
19	Donaldson Bros.	Lub.	4,000	Baltimore
19	J. and A. Allan	,,	62,000	Philadel.
	Grangemouth—			
18	J. Currie and Co.	,,	4,320	Hamburg
18	W. Graham-Yooll and Co.	Lamp	1,600	,,
	Leith—			
18	W. Gibson and Co.	Lub.	1,320	Antwerp
18	Henderson and McIntosh	,,	30,520	Philadel.
	Cork—			
16	Palgrave, Murphy and Co.	,,	200	Hamburg
	Belfast—			
18	G. Heyn and Sons	,,	320	Riga
20	Anglo-American Oil Co. (Lucifer)	Lamp	709,560	New York
	Dublin—			
20	Anglo-American Oil Co. (Lucifer)	,,	466,360	,,
20	,, ,,	Petrolite	243,200	,,
	Total for Week		6,086,260	
	Total for the Fortnight		14,151,320	
	Deduct to Correct;—			
	London—			
19/3	General Pet. Co. (Kura)	Lamp	204,150	Philadel.

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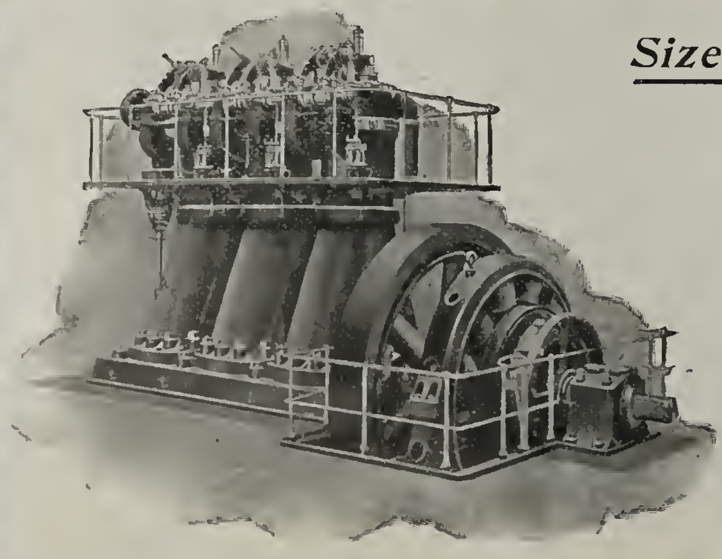

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The Petroleum Review.

By **PAUL DVORKOVITZ.**

Vol. XVI. *(New Series.)* May 11th, 1907. No. 398.

Editorial Notes.

The Port of London: Oil Men to the Rescue. The problem of improving the Port of London has for years been a subject which has engaged the serious attention of various departmental and administrative bodies, yet to-day matters stand pretty well as they stood a quarter-of-a-century ago. But the problem is to remain in abeyance no longer, for oil men have come to the rescue with a scheme which, we should imagine, is bound to receive unanimous approval from all quarters. The time has gone by when the advisability of increasing the facilities of the Port of London was open to doubt. Each year the necessity becomes more apparent, and to strangers the marvel is that for so long the Thames has occupied such a secondary position in regard to ocean-going traffic. That this will soon be remedied is now assured, for we are pleased to state that the London and Thames Haven Oil Wharves, Ltd., intend to take advantage of the freehold land which they have at Thames Haven, and to construct thereon wharves and jetties for loading and unloading goods, as well as for passenger traffic, while a dry dock is to be cut which will be capable of receiving the largest ships of the world. The possibilities of this new ocean traffic centre are almost unlimited. Its easy access from London and the provinces—for the land has the London, Tilbury and Southend Railway Co.'s line at the rear—must stand it in good stead, but perhaps a more important factor is that the land has a deep-water frontage of over half-a-mile, and consequently the largest ocean-going vessels can draw alongside at any state of the tide, while what is also important, the tortuous bends which are met with higher up the river will be avoided, and much time saved. Personally, we view the proposal with the greatest satisfaction, being well aware of its significance, and congratulate the London and Thames Haven Oil Wharves, Ltd., not only in securing such a valuable asset, but in putting before the world the first practical proposal of improving the Port of London.

How Matters Stand at Baku. The latest reports from Baku shew that the shipping strike, which has crippled the trade for nearly two months, is nearing its end. Most of the demands of the men have been conceded by the shipowners, whilst against those who, after this, still continue to make trouble, General Taube, the Special Government Commissioner, has issued a notice threatening them with fines, imprisonment and expulsion. It may, therefore, confidently be expected that matters will soon return to their normal course. In the meantime the opening of navigation on the Volga and its tributaries, by creating a fresh demand for fuel oil for steamers, has tended to completely exhaust the small stocks which were still left in the interior. Most of the selling firms are without oil, whilst those who still have some stocks are fully sold up under contracts. By a series of combinations, the supply of fuel oil to steamers is kept up at certain points, but in the majority of storage depôts there is nothing for sale. Even when the strike is settled and the whole Caspian tank fleet work to its utmost capacity, it will be very difficult to make up for the lost time, as it takes at least a month to deliver oil from Baku to, say, Nijni-Novgorod on the Volga.

Hurrah for Scotland! Year in and year out the Scotch oil industry continues its eminently successful career, and the results of the operations of the various companies for the past twelve months are no exception to the now well-established rule. A glance at our list of Scotch share quotations is in itself sufficient to prove how eagerly investors seek after such remunerative investments, and when ordinary shares stand at two or three times their face value, one may depend upon it that this is brought about by no passing fancy on the part of capitalists. During the present week two of the Scotch companies have issued their balance sheets for the past year—we refer to the Broxburn and the Oakbank Oil Companies—and in each case a 15 per cent. dividend upon the ordinary shares for the twelve months is declared. With regard to the Pumpherston Oil Co. matters stand in an even better position, and the acquisition of a valuable coal property contiguous to the oil works is one of those wise moves on the part of the directors which have in the past proved so exceedingly remunerative. It is a great pity that the success which has all along attended the working of the shales in Scotland has not left its touch upon the English companies operating in the productive oil fields of the Caucasus.

California to the Front. The growing importance of the Californian oil industry has caused the United States Government to pay special attention to the various developments which have taken place during the past twelve years, and the monographs which they have recently issued go no short way to prove that in years to come that State will rank as important as any petroleum producing centre of the world. In future issues we shall publish these monographs in detail, indeed the present issue contains a portion of the first publication, and therefore it is unnecessary that we should pay more than passing attention to them, important as they doubtless are. It is interesting, however, here to recall the rapid strides which have been made in regard to the development of California's petroleum industry. Thirty years ago the yearly production could not be placed at more than 12,000 barrels. During the following ten years it increased by 3,000 per cent., while after another decade the yearly production was over 1,250,000 barrels, a figure, however, which sinks into insignificance when compared with the production of the past year which can be placed at slightly under 30,000,000 barrels. Nor was this a record, for during the twelve months, owing to unfavourable market conditions, the production declined from the figure established during 1905 by several million gallons. But a new period of activity has overtaken California, and everything points to the fact that, consequent upon the opening of additional and sorely needed outlets for the State's oil, the total yield this year will run into figures which will put the whole of the other fields in America totally in the shade. To-day California is, without a doubt, very much to the front, and is likely to remain there, and the English companies operating in the State have certainly a future which is full of rosy prospects and substantial dividends.

◆

CALIFORNIA OILFIELDS, LIMITED.

The report of the directors of the California Oilfields, Ltd., states that as a result of the operations for 1906, and after providing for depreciation, there is a profit of £74,413, making, with the previous balance brought forward, a total sum of £85,716. Out of this they propose to pay a dividend of 30 per cent. for the year. During 1906 development work on the company's properties was limited owing to the circumstances then existing, but recently the company's agents have been able to effect sales upon substantially better terms than were obtainable last year, and deliveries have, consequently, been resumed on a liberal scale. The company has now a total of 41 producing wells, as against 39 at the conclusion of the previous year's operations, but in this number the wells upon the recently acquired properties are not included.

◆

THE BAKU OIL MARKET.

The Baku market is rather stagnant, although prices remain high:—Crude oil, about 27 to 27½ copecs; residuals, 29½ to 30 copecs; and kerosene, 34 copecs per pood. The production of between 38,000,000 and 40,000,000 poods per month is sufficient to satisfy the market, and it is now clear that only continued boring on a large scale for a certain period is capable of restoring normal prices of crude to the Baku market.

◆

THE TIN PLATE MARKET.

Messrs. Norton, Owen & Co., of 4, Bishopsgate Street Within, London, E.C., report under date 9th May, 1907, as follows:—

Since our last report a very large amount of business has been put through for delivery over the third quarter of the year. The position of the trade is now a very strong one, and in view of the increasing cost of raw materials, the tendency of prices is upwards. However, at a meeting of the makers' combination to-day, it was decided not to alter prices at present. We quote to-day as under:—

IC	18¾ × 14	124 sheets	110 lbs.	15/4½ per box.
IC	19¼ × 14	120 ,,	110 ,,	15/4½ ,,
IC	20 × 10	225 ,,	156 ,,	21/6 ,,

F.o.b. Wales. Tin lining and iron hooping extra.

LONDON OIL SHARE MARKET.

Friday, May 10th, 1907.

The Oil Share section of the London Stock Exchange continues to be very stagnant, the only movements being centred in Shell Transports, which continue strong, and Russian issues, which are weak. For the convenience of our readers, we quote Saturday, April 27th prices in full:—Anglo-Russians $\frac{1}{16}$-⅛, Assam Oil ½-⅝, Baku Ordinary 2s. 6d. to 3s., Preference 4s. to 5s., Bibi-Eybats ⅜-½, Debentures 84-89, Californian Oilfields 6¼-6¾, Refineries 1⅞-2⅛, European Preference $\frac{1}{16}$-$\frac{3}{16}$, Debentures 82-86, Russian Ordinary 7s. to 8s., Preference 8s. 6d. to 9s. 6d., Debentures 89-92, B 6 per cent. Debentures 60-65, Schibaieff Ordinary 4s. 6d. to 5s. 6d., Preference 2-2½, Shell Transport Ordinary 45s. 3d. to 45s. 9d., Preference 9½-10, Spies $\frac{15}{32}$-$\frac{17}{32}$, and these quotations ruled untll on Tuesday Shell Transport Ordinary strengthened to 45s. 9d. to 46s. 9d.

Wednesday, May 1st, being a Stock Exchange holiday, no business was transacted, and on the following day the deduction of the dividends in both European Debentures and Bibi-Eybat ditto left quotations at 79-83, and 81-86 respectively, while Shell Transports moved up again to 46s. 3d. to 47s. 3d., closing strong.

On Friday the market was not very firm, Russian Ordinary losing 1s. per share at 6s. to 7s. and Shells shedding 3d. leaving off 46s. to 47s.

On Saturday Russian Preference dropped 1s. 6d. to 7s. to 8s., and the Debentures were quoted 1 lower at 88-91.

No further changes occurred until Wednesday, when Shell Transport rose another 6d. to 46s. 6d. to 47s. 6d.; while Russian Debentures lost another point at 87-90.

The present account being of 19 days' duration, no settlement has taken place since our last issue.

Latest quotations are given in full on page 264.

◆

NEW ENGLISH COMPANY.

Peruvian Petroleum Syndicate.

Registered with a capital of $3,000 in £1 shares. The object of the company is to acquire land on the Lobitos and other oil fields, in the Province of Piura, Peru, and to adopt an agreement with Messrs. Williamson, Balfour and Co. and Messrs. Milne and Co. No initial public issue. First directors (not less than three no more than five): A. Williamson, K. Mathieson, and E. Cooper. Remuneration as fixed by company.

◆

A STATE OIL EXHIBIT FOR HARRISBURG.

Pennsylvania is to have a State oil exhibit of a permanent nature in order that the wonderful record made by that State in the production of petroleum should be suitably preserved. It is more than probable that the private collection of samples belonging to the late Mr. John F. Carll will be acquired, this being the most complete collection of the geological developments of Pennsylvania to be found anywhere.

WRECK OF THE "SHELL" TRANSPORT COMPANY'S OIL-TANKER "SILVERLIP."

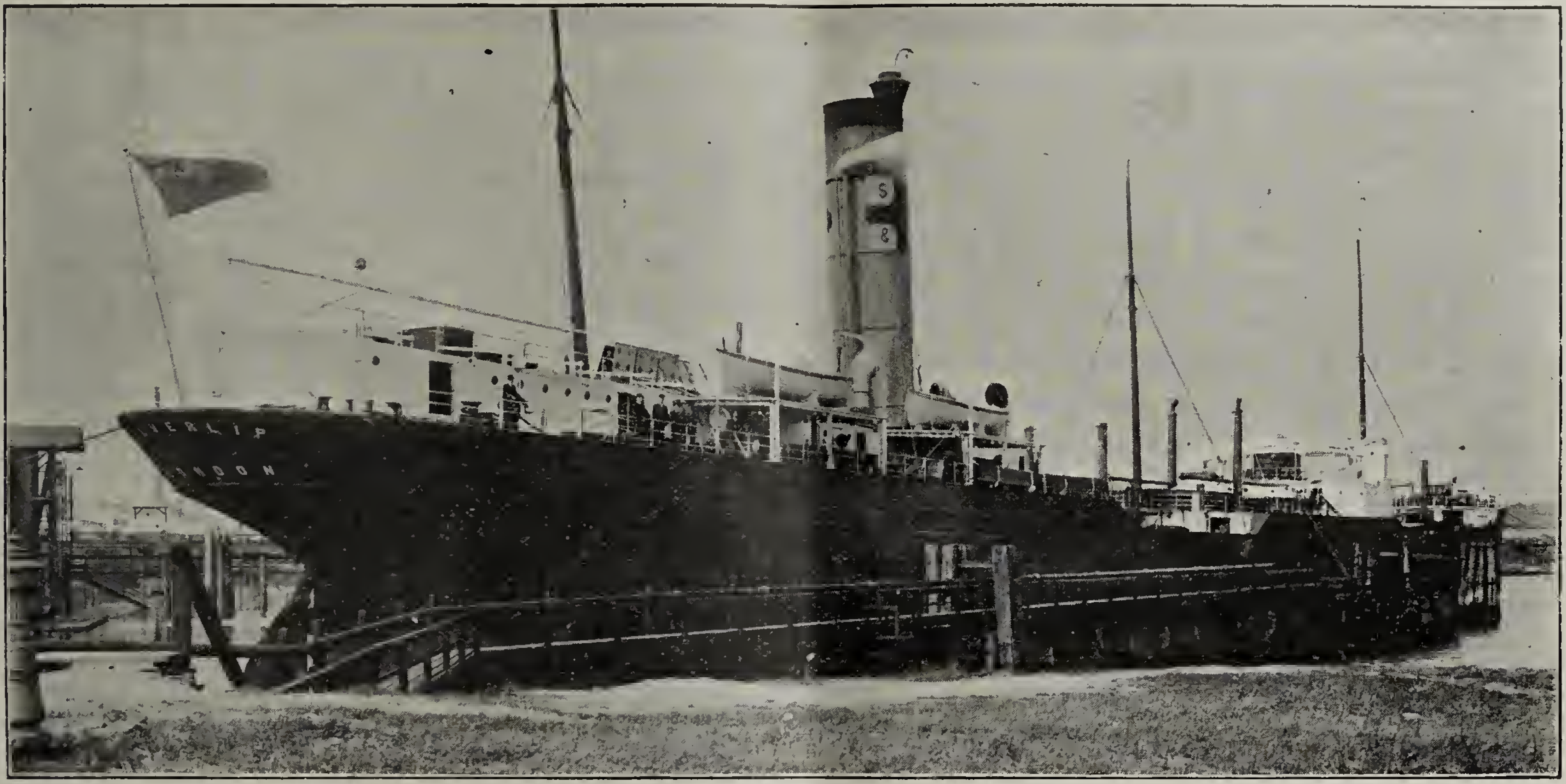
We regret to have to record one of the worst disasters ever associated with the transport of bulk benzine to this country—we refer to the wreck consequent upon explosion of the s.s. "Silverlip," one of the finest of the "Shell" Transport and Trading Co.'s fleet of oil tankers.

The "Silverlip" was engaged in the transport of benzine from the Far East to the United Kingdom and the Continent, and at the time of the disaster she was journeying from Balekpappan to this country with a full cargo of heavy benzine—the quantity being near 9,000 tons. She left Balekpappan on March 10th, and called at Singapore, leaving that place fifteen days later. Her journey to England was rendered the shorter by reason of the fact that owing to the removal of the restrictions prohibiting such cargoes to go through the Suez Canal, she proceeded along this shorter route, being due at Thames Haven last Thursday week, where it was intended she should discharge about 5,000 tons of her cargo. While crossing the Bay of Biscay—long. 7·17, lat. 45·55—the preceding afternoon an explosion took place in tank No. 4, which was situated amidships. Within a few minutes the "Silverlip" from stem to stern was a blazing mass, and following the spreading benzine, the flames covered the sea for a great distance.

Everything possible was done to save life, the boats being speedily got out. The difficulty of communicating with the forward portion of the vessel was great, but this was soon overcome by the men jumping into the sea, and swimming to the boats as they were pulled alongside. In this way all the crew were saved excepting five members, who, it is believed, were killed by the first explosion. The names of the victims are:—Bell, the engineer; Grant, boatswain; Munroe and Abbas, firemen; and Kruetling, carpenter.

Fortunately the steamer "Westgate" had her attention called to the fire when about nine miles away from the scene of the disaster, and by altering her course she was able to pick up the crew of the "Silverlip," though some were badly burned. From the first it was seen that nothing could be done to save the "Silverlip," and so when the crew were safely on board the "Westgate," the oil tanker with her 10,000 tons liquid cargo was left to her fate.

The "Silverlip" was built by the well-known firm of Sir W. Armstrong Whitworth and Co., Ltd., Newcastle-on-Tyne, and was launched at Wallsend, in November, 1902, the ceremony being performed by Lady Samuel. The vessel was capable of carrying a total deadweight of 10,500 tons on a draught of water of 26 feet 6 inches. Her dimensions were:—Length, 470 feet; breadth, 55·2 feet; and depth, 33·1 feet; her N.H.P. being 586. The pumping appliances on the "Silverlip" for discharging the liquid cargoes were very complete, and consisted of no less than five separate pumps, two of specially large size, capable of discharging 250 tons an hour each. As the vessel was built in order to carry dry as well as liquid cargoes, the winches and derrick gear assumed a position of great importance, there being no fewer than sixteen derricks, so that dry cargo could be discharged from every hatch on the vessel at once. She was fitted with powerful triple expansion machinery designed to propel her when fully loaded at a speed of eleven knots per hour, and like the other oil tankers belonging to the "Shell" Transport and Trading Co., she burned liquid fuel under her boilers.



The photograph which we reproduce of the "Silverlip" was taken while the tanker was discharging oil into the storage tanks at Hamburg. For the loan of the photograph we are indebted to Captain Coundon, Marine Superintendent of the "Shell" Co.

THE OAKBANK OIL COMPANY.

The report of the Oakbank Oil Co., Ltd., for the year to 31st March last, to be presented at the meeting in Glasgow next Wednesday, states that the amount at the credit of profit and loss account, including £5,061 brought forward is £54,442; from that falls to be deducted interest on loans £1,566. The directors recommend a dividend at the rate of 15 per cent. per annum on the paid-up capital, the writing off depreciation on plant of £12,000, the placing to retort renewal fund of £5,000, the reduction of the price paid for the Duddingston shale field £3,000, the adding to works insurance fund of £2,266, and the carry forward of £4,940. The above dividend is to be payable, one-half on 22nd instant, and the other half on 22nd November next, free of income tax. The dividend for two months on the £1 10s. per share repaid on 31st May, 1906, will be paid in full, along with the first half of dividend on 22nd instant. All the shares will then be of the same value. The price realised for the products of the company is larger than during the previous year, and the increase has been sufficient to meet the greater cost of fuel and wages. The repayment of £1 10s. on each of the fully paid shares was made on 31st May of last year, and in virtue of a special resolution adopted and confirmed at extraordinary general meetings of the company held on 8th August, 1906, and 5th September, 1906, the shares of the company, originally 20,000 £10 shares, have been sub-divided into 200,000 £1 shares, on which the sum of 17s. each has been credited as paid up, making the paid-up capital of the company £170,000. The directors record with regret the death of their colleague, Mr. A. R. Gillespie.

THE BEREKEI OIL FIELD DURING 1906.

The past year has generally tended to lower the value of the Berekei oil field in the estimation of the world. The production in 1906 was only about 550,000 poods, obtained from five boreholes. Until 1906 the only producing firm at Berekei was Messrs. Nobel Bros., who had spouters, but in 1906 their three wells produced only 170,000 poods, whilst two wells of Mr. O. A. Benkendorf yielded about 410,000 poods. Altogether since the commencement of operations at Berekei there were produced about 4,000,000 poods of crude. There are no statistics available about the Berekei petroleum business.

The following is the state of affairs of the various firms operating at Berekei.

(1) O. A. Benkendorf has on Government plot two boreholes in exploitation; well No. 1 with syphon arrangement yields 500 to 600 poods daily; No. 2 flows with water and small admixture of oil; well No. 3 is now being drilled and has reached a depth of 195 sagenes, without showing yet any oil.

(2) Nobel Bros.—The production has practically ceased. On the Umtzieff plot in one well 1,253 feet were drilled, and a second well has been laid down. There are deep wells on three plots, whilst on four plots the wells are only 490 to 560 feet deep.

(3) Albert MacGarvey.—On plot No. 92 there is a well 1,890 feet deep, in which all efforts to shut off the water have so far proved unsuccessful. A well is being drilled on plot No. 115, but no oil has been found yet.

(4) Schibaieff Petroleum Co., Ltd.—No work done in 1906. On plot 135 a well has heen sunk to a depth of 1,190 feet without striking any oil.

(5) Caspian and Black Sea Society.—On three plots three wells are being drilled, but no results have been achieved yet.

(6) Messrs. Benkendorf and Co. are drilling one well, which has attained a depth of 1,330 feet, but as yet without any positive results.

(7) Batabanoff.—No work done for a long time. One well was stopped at 1,050 feet, whilst another is spouting water.

GROSNY PRODUCTION DURING FEBRUARY.

According to official statistics just published, the production of crude oil at the Grosny oil fields in February amounted to 2,916,751 poods, against 2,805,030 poods produced in January. The increase has occurred solely in the production by spouters, which, however, was less than in December, while the production by baling was smaller than in January.

The figures of the production for the two months are as under:—

	By Bailing.	By Spouters.	Total.
January ..	2,658,380	146,650	2,805,030
February ..	2,467,376	449,375	2,916,751
Total ..	5,125,756	596,025	5,721,781

The production of the principal firms in February, was as under:—

	Production. Poods.	Number of Producing Wells.
Akhverdoff Co.	1,429,100	45
Anglo-Russian Maximoff Co., Ltd.	465,200	14
Spies Petroleum Co., Ltd. ..	400,315	44
Kasbeck Syndicate, Ltd.	131,590	8
North Caucasian Co.	129,400	10
Tcheleken-Daghestan Co. ..	87,460	10

The total number of wells in exploitation in February was 167, against 172 in January. On the 1st of March there were 167 wells in exploitation, 32 in drilling, 53 inactive, and 53 derricks where boring has not yet begun.

PRODUCTION OF ENGLISH COMPANIES IN RUSSIA.

Baku Russian Petroleum Co., Ltd.—The production for the week ended 27th April was 282,000 poods, or 4,546 tons; and for the week ended May 4th was 434,000 poods, or 6,997 tons. The increase is due to a fountain.

Russian Petroleum and Liquid Fuel Co., Ltd.—The production for the week ended 28th April was 170,000 poods, or 2,741 tons; and for the week ended 5th May was 152,000 poods, or 2,451 tons.

Spies Petroleum Co., Ltd.—The output for the week ended 28th April was 122,785 poods, or 1,980 tons; and for the week ended 5th May, 125,065 poods, or 2,017 tons.

The European Petroleum Co., Ltd.—The production for the week ended 28th April was 137,798 poods, or 2,222 tons; and for the week ended 5th May was 119,742 poods, or 1,930 tons.

THE OIL FIELDS OF CANADA.

DEVELOPMENTS DURING 1906.

The developments which have taken place during the past year in the Canadian oil fields form the subject of a report recently issued by the Canadian Geological Survey. The authors deal separately with the various petroliferous localities, first touching upon Nova Scotia, where they say, oil has long been known to occur, the most promising locality being in the Lake Ainslee district, Cape Breton Island. In 1905 and 1906 boring operations for oil have been going on actively. The syndicate operating there intend to go on with the work in 1907.

Another locality in Nova Scotia where a hole in search of oil was recently put down is at Cheverie, where a depth of over 1,000 feet has been reached. Operations will also be continued there.

New Brunswick has a small producing field at Memramcook, where several wells are regularly pumped, although the output is small. There exists, however, in New Brunswick, a possible source of petroleum, which perhaps has not received all the attention that it deserves. In Albert county there exist large deposits of bituminous or oil-bearing shales, from which oil could be extracted by distillation, and these deposits, under prudent and careful management, may yet become a feature in the Canadian oil industry. The possibilities of these oil-bearing shales have at different times been mentioned by members of the Canadian Geological Survey. A similar industry is being carried on very successfully in Scotland.

In Gaspe, Province Quebec, operations in search of oil have been carried on for the last ten years on a very large scale, but the results so far have been disappointing. More than 50 holes have been bored, one of which reached a depth of 3,700 feet.

Ontario is responsible for practically the total Canadian oil production. The following fields are located in the south-western peninsula between lakes Huron and Erie.

The older oil pools, or oil-producing areas, have been described at different times, and it will be sufficient to mention here that the Petrolia district has been yielding since 1862, the Oil Spring pool is about contemporaneous, and since then other oil areas have at various times been "brought in," such as Bothwell, Moore, Leamington, Dutton, Thamesville, Wheatly, Tilbury and others, most of which are included in the counties of Lambton, Kent and Essex.

The feature of the oil industry in western Ontario has been the discovery of the new producing areas of East Tilbury township, where a pool which promises well, was struck in the vicinity of Bothwell.

On Manitoulin Island boring operations were actively carried on during 1906 by five different companies. This field, however, has not yet contributed to the Canadian production of oil.

In Western Canada, throughout all the provinces, a great deal of energy is being displayed in prospecting for petroleum. In Manitoba boreholes are being put down at two places at least where surface indications had been reported, or where signs of the presence of oil were said to have been found on sinking wells for water. One of these places is at Manitou in southern Manitoba, and the other is at Neepawa, on the Minnedosa branch of the Canadian Pacific Railway.

Deep boring operations are also being carried on in Saskatchewan and in Alberta. The latter province is more especially prominent in this direction. There are at present some 12 or 15 deep-drilling rigs prospecting various areas between the international boundary on the south and lower part of Athabaska river in the north.

In South-western Alberta oil has been struck in two wells at depths slightly exceeding 1,000 feet. It is reported that these wells could be pumped and made to yield, but the lack of means of transportation is a drawback at present. However, prospecting is going on very actively, and should the results obtained in this section, which lies south-west of Pincher Creek, justify it a pipe line or a railway spur, both of which are very feasible, would be constructed. At Calgary and at Medicine Hat drilling rigs are in operation, and at the latter place provision has been made to reach a depth of 3,000 feet. In the northern part of Alberta the search for petroleum is being carried on in the vicinity of Fort McMurray, on the Athabaska river, some 300 miles north of Edmonton. The extensive outcrops of tar sands in this region have frequently been referred to by various members of the Geological Survey. These certainly indicate the presence of oil bearing strata, and there is little doubt that where the underground structure and other conditions are favourable, large accumulations of oil have gathered, and this far north country may become quite a factor in the production of petroleum in Canada.

In British Columbia, two companies were working in South-east Kootenay in 1906. The depths reached in this district are not yet sufficient to be conclusive.

Some work was also being carried on in the Cariboo district, from where very promising indications have been reported.

THE STANDARD'S NEW CALIFORNIAN PIPE LINE.

The first shipment of pipe for the new line of the Standard Oil Co. to the oil fields of the Midway and McKittrick districts has reached Bakersfield, and work was started at once. The building of the line, which will be 68 miles in length, is the result of the contract recently signed by the producers of the Midway field, by which the Standard obtains the oil of the district for 30 cents a barrel.

By contract, the line must be ready to handle the Midway oil in six months. This will give employment to between 300 and 500 men. An eight-inch-pipe will be used, and the pumping stations will be established at McKittrick and Midway. The capacity will be about 150,000 barrels. The building of the line has induced a mild boom in the districts affected, and work on two refineries has been started, one being controlled by the Spreckels interests, while the other is managed by a Los Angeles concern.

THE PRODUCTION OF OPERATING FIRMS AT BAKU IN 1906.

We are now in possession of the full details of the production of the various petroleum companies operating in the Baku oil fields during 1906, and which, for the sake of comparison, we have placed alongside the figures for the preceding year. It will be seen that we have limited the list to those firms producing over 1,000,000 poods during the 12 months.

The figures are as follows :—

	1906.	1905.
Nobel Bros.	55.148,016	47,585,520
Caspian and Black Sea Society	29,652,897	26,445,533
Baku Naphtha Co.	25,406,368	23,937,109
Caspian Society	24,856,369	20,142,643
Moscow-Caucasian Co.	23,608,052	24,856,676
Mantascheff and Co.	23,187,289	26,220,191
Pitoeff and Co.	13,926,700	10,491,695
Zoubaloft	13,675,000	14,386,000
Aramazd Co.	13,064,810	9,108,494
Assadulaeff	12,939,322	7,856,773
Mirzoeff Bros.	12,936,043	10,177,743
Russian Naphtha Co.	12,913,430	11,802,035
Baku Russian Petroleum Co., Ltd.	11,504,670	15,264,773
Nagieff	10,690,000	12,328,317
Russian Petroleum and Liquid Fuel Co., Ltd.	10,559,414	13,022,539
Schibaieff Petroleum Co., Ltd.	9.630,205	10,333,249
Naftalan Co.	9,239,516	7,307,637
Bibi-Eybat Petroleum Co., Ltd.	8,628,500	1,848,300
Ter Akopoff Co.	7,626,252	4,543,120
Shikhovo Co.	6,625,034	4,323,939
Neft Co. (late Tumoeff and Co.)	6,472,000	4,888,213
Benkendorf and Co.	5,375,370	4,990,205
Tiflis Co. (Bebe-Aibat)	5,116,500	5,593,150
Kaiantaroff and Co.	5,015,500	6,582,000
European Petroleum Co., Ltd.	4,984,350	7,000,330
Kavkaz Co.	3,911,357	2,761,667
Caucasian Naphtha Co.	3,617,310	2,659,263
Rossiskoie Naphtha Co.	3,466,200	—
Soutchastniki Co.	3,329,350	1,915,256
Russian Bebe-Aibat Co.	3,100,170	3,886,770
Voroutzoft Dashkoft	2,959,450	2,421,700
A. N. Miloff and A. N. Tairoff	2,732,300	2,422,078
Apscheron Naphtha Co.	2,640,500	1,710,500
Baku Naphtha and Trading Co.	2,225,000	9,841,000
Melikoff and Co.	2,075,461	1,376,173
Moscow-Volga Co.	2,027,512	—
Adamoff, A. I.	1,980,946	1,727,629
Balakhany Naphtha Co.	1,763,678	1,434,751
Krasilinkoff Bros.	1,752,829	1,587,620
Kolesnikoff Bros.	1,503,816	1,339,028
Hagen, T. and E.	1,399,6 9	1,308,403
Vorotan Co.	1,380,090	—
Popoff, I. R.	1,276,921	—
Kalantaroff, M. A.	1,257,300	—
Pharos Co.	1,224,159	—
Mitrofanoff, D. D.	1,184,818	—
Arshalius II. Co.	1,161,469	—
Tchernoneboft	1,157,783	—
Miloff and Tairoff	1,122,400	—
Nabatoff Bros. and Co.	1,089,543	1,153,900
Aralo-Caspian Co.	1,087,200	—
Sinai Co.	1,087,300	—
Adamoff, I. D.	1,076,000	—
Bakht Co.	1,070,013	—
Sarukhanoff	1,053,845	1,013,084
Petrol Co.	1,039,253	—

The total output in 1902, *i.e.*, 447,932,991 poods was produced by 135 firms, which included six firms with a production exceeding 20,000,000 poods each, nine firms with a production between 10,000,000 and 20,000,000 poods, 41 firms—between 1,000,000 and 10,000,000 poods, and 79 firms—under 1,000,000 poods each.

The six first-class firms, together, contributed about 40 per cent. of the total production in 1906.

THE ENGLISH COMPANIES AT THE BAKU FIELDS.

WHY NO DIVIDENDS?

During the past few days a letter has appeared in a number of the London financial journals which puts the case of the shareholders in the Anglo-Russian petroleum companies in a nutshell. We reproduce this letter *in extenso*. It is as under :—

Sir,—In view of the large amount of capital invested by English people, the following information, based on official statistics, may be interesting to your readers :—

BAKU OIL FIELDS.

	Production Poods.	Average Market price. Copecs per pood.	Market value.	
			Roubles.	£ Sterling.
1901	671,000,000	8·11	54,418,100 =	5,790,000
1902	636,000,000	6·72	42,739,200 =	4,547,000
1903	596,000,000	9·04	53,878,400 =	5,731,000
1904	614,000,000	15·00	92,100,000 =	9,798,000
1905	410,000,000	20·50	84,050,000 =	8,941,000
1906	447,000,000	25·75	115,102,500 =	12,245,000

From this it is evident that the financial results are in favour of the last three years, in spite of the smaller production; in fact, many Russian firms have made large profits since 1903. As to the English companies, I will only take two examples :—

1. Russian Petroleum and Liquid Fuel Co.—The production for the three years ended 1903 was 91,000,000 poods; average market value, 7·72 copecs per pood, equal to 7,025,200 roubles, or £747,000. For the three years ended 1906—Production, 53,500,000 poods, average market value, 20 copecs per pood, equal to 10,700,000 roubles, or £1,138,000. For the three years ended 1903 this company paid 48 per cent. in dividends, and yet with an increase of £391,000 in the value of the production for the last three years, the only dividend paid was 2½ per cent. in 1904.

2. Baku Russian Petroleum Co.—The production for the three years ended 1903 was 71,700,000 poods; average market value, 7·72 copecs per pood, equal to 5,535,240 roubles, or £588,000. For the three years ended 1906—Production, 53,500,000 poods: average market value, 20 copecs per pood, equal to 10,700,000 roubles, or £1,138,000. Difference in favour of the last three years, £550,000, and yet there is no dividend.

These are startling figures, and I may say the reasons for this disastrous state of affairs are well known to people in the trade, but the shareholders are left in the dark. I only hope the affairs of these companies and other Anglo-Russian oil companies may yet be investigated in the interests of shareholders.—I am, etc.,

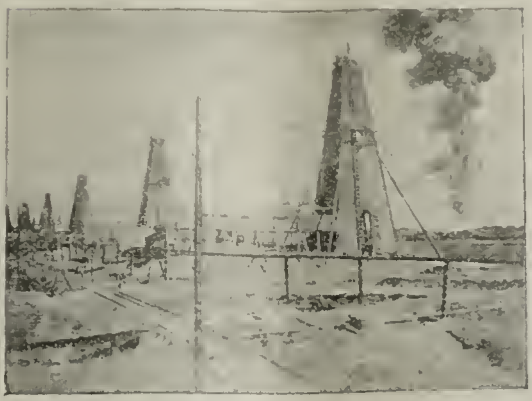
A Shareholder.

London, E.C., 4th May.

◆

At Moreni, five new producing wells have been completed lately, of which three belong to the Romano-American Co —Well No, 10 at a depth of 271 metres, No. 12 at 207 metres, and No. 6 at 422 metres. The other two wells belong to the Regatul Roman Co., on which one is on Government land, placed in the bed of the River Cricov, spouts at intervals, producing between 100 and 150 tons daily. The other well is on private property, and produces between 50 and 80 tons daily. Well No. 6 of the Romano-American Co. is now the most prolific at Moreni; it spouts at intervals, producing about 300 tons daily.

RUSSIAN .. AND ROUMANIAN .. NOTES.



Baku Production.—The production of crude oil at the Baku oil fields during the first half of April amounted to 18,364 561 poods.

Moreni Production.—The production at the Moreni oil field in March was:—Regatul Roman Co., 16,903 tons; Romano-American Co., 3,992 tons; Pleyte and Co., 2,281 tons; total, 23,176 tons.

Managerial Changes in the Romano-American Co.—Mr. H. P. Chamberlain has resigned his position as managing director of the Romano-American Co., and Mr. W. C. Bower has been appointed in his place. Mr. Bower will share his duties with Mr. Nelson K. Moody.

Wind Up.—At an extraordinary meeting of shareholders of the Ialomitsa Co., held on the 27th March, the sale was approved of the company's properties to Mr. Dupont of Paris, for the sum of 170,000 francs in cash and 200,000 francs in shares. It was resolved to wind up the company.

Thanks.—At a meeting of the Roumanian Petroleum Association, held on April 9th, a resolution was moved by Mr. Max I. Schapira, and adopted unanimously, thanking the Government for the very effective manner in which they have protected the petroleum industry during the recent agrarian troubles.

Reduced Russian Rates.—At a meeting of the Railway Tariff Committee, held on the 10th inst., the question of establishing a special reduced rate for the transport of liquid fuel from Baku to the interior of Russia, *via* Baladjari on the Vladicaucasian Railway and also *via* Batoum and the Black Sea was considered.

Baku Oil Deliveries.—The total deliveries of various oils from Baku in the first two months of 1907 amounted to 16,400,000 poods, against 11,700,000 poods in the corresponding period of 1906. The increase has occurred chiefly in illuminating oils, of which there were dispatched 8,700,000 poods, against 4,800,000 poods in the first two months of 1906.

Fires.—On April 28th a fire broke out at Bustenari, on the property of the Gallo-Romana Co., on their wells Nos. 101 and 107. The damage exceeds 150,000 francs. At Campina there was a fire on well No. 63 of the Steaua Romana, which had been spouting; a benzine motor and the crude oil reservoir were destroyed. Fortunately there was no loss of life in either case.

Refinery Transfer.—The Aquila Franco-Romana have decided to relinquish the lease held by them from Messrs. Rusicka, Elias and Taubes of the petroleum refinery at Plopeni. Negotiations are said to be in progress for the lease and ultimate purchase of this refinery by the Colombia Co. Mr. L. Elias, managing director of the Colombia Co., has gone to Paris with this object in view.

Batoum Exports.—A report from Batoum, dated the 19th April, says that the exports of various products are very active. The total exports for the week ended April 12th amounted to the very substantial figure of 1,940,000 poods, which included 1,552,000 poods illuminating oil and 254,000 poods machine oil. Of the total shipments 937,000 poods were directed to Hamburg and Antwerp, 433,000 poods to London, 327,000 poods to Vladivostock, and 126,000 poods to Malta. Prices remain unchanged.

Roumanian Labour.—The Roumanian Department of Industry has issued a circular to manufacturers reminding them of the provisions of the law for the encouragement of industry requiring firms enjoying the privileges of this law to have Roumanians as two-thirds of their employés within five years of the promulgation. Five years having now elapsed, the manufacturers are asked to send in, within a month's time, lists of their employés to shew that they have conformed with this requirement; failing this, they will lose the privileges accorded by this law. Numerous protests have been raised against this order.

Consoling to Englishmen.—Owing to the high prices of fuel and scarcity of oil cargoes, tank steamers are selling very cheaply on the Volga. Thus a steamer of 60 horse-power has been sold for 3,000 roubles

Continued Roumanian Progress.—The fears entertained that April will shew a decline in the output of the Roumanian oil fields will apparently not be realised, as the reports to hand shew that the production continues unabated.

Roumanian Activity.—Great activity is now displayed by the Italo Roumanian Co. at Campeni-Bacau, where they have already five boreholes. The oil in this locality is found at a depth of about 1,000 metres, and is very rich in paraffin.

From Grosny.—One of the wells on plot No. 40 in the central part of the Grosny oil field has been spouting water. The total production of the Grosny oil fields has declined owing to the stoppage of the two spouters of the Akhverdoff Co.

A Giant Oil Barge.—The Sormovo Shipbuilding and Engineering Works near Nijni-Novgorod, on the Volga, are now completing the construction of an oil barge, capable of carrying 480,000 poods, or roughly 7,700 tons of oil. It has been ordered by Mr. Sirotkin, at a cost of 120,000 roubles.

Professor Mrazec, well known for his numerous works on the geology of petroleum and member of the Permanent Petroleum Commission attached to the Roumanian Ministry of Domains, has been elected member of the Roumanian Academy. Upon this occasion he read a paper on the "Genesis of petroleum and the petroliferous formations in Roumania."

Roumanian Developments.—Well No. 2 of the Trajan Co. at Baicoi now produces from 90 to 100 tons of crude oil per day. Well No. 1, also at Baicoi, has now reached a depth of 435 metres, and it is expected to strike oil in course of this month. A number of wells belonging to the same company at Bustenari are also expected to strike oil this month, so that their production will shortly experience a considerable increase. At present the total output of the Trajan Co. is about 150 tons daily.

Roumanian Prices.—The price of crude oil in Roumania remains high, and there is the possibility of a further advance, as the output is not growing as fast as was expected. The price of illuminating oil on the home market is maintained by the cartel at 100 francs per ton. The Romano-American Co. had at the time of writing not yet given any definite reply on the question of their joining the cartel. Exports of petroleum products continue to be very brisk, and the export prices of all products remain good.

No Expert Need Apply.—At a spot about 12 versts from Nevinnomysskaia station on the Vladicaucasian Railway, a local landowner named Nazaroff drilled a well to a depth of 875 feet with one column of casing in the hope of finding oil, of which, however, there was no sign either on the surface or in the depths. The proprietor was evidently led away by the general assertion that in the Northern Caucasus there was petroleum in the tertiary formations, and without taking expert advice, wasted a sum of 12,000 roubles. He has now abandoned the well.

Roumanian Statistics.—The figures of the total production of crude oil in Roumania during March not being yet available, the *Moniteur du Petrole Roumain* publishes the following details of the output of some of the leading companies:—The Steaua Romana produced 36,038 tons, against 37,958 tons in February; this includes 20,617 tons from the Campina property, against 21,430 tons. The Bustenari Co. produced 11,641 tons, the Telega Oil Co. 3,603 tons, and the Colombia Co. 2,370 tons. These figures shew that in March the production was maintained at the same high level as in February. April, however, will probably shew a decline owing to trouble with the water supply, which caused the stoppage of exploitation of some wells.

THE BAKU-BATOUM EXPORT RATE FOR KEROSENE.

The committee sitting in St. Petersburg to consider the question of the proposed reduction in the rate for kerosene on the Baku-Batoum Railway met on the 10th April to receive the report of a sub-committee to determine the self-cost to the railway of the carrying of kerosene from Baku to Batoum. The sub-committee found that the expenses connected with the transport, at a cost of fuel of 9 copecs per pood, amount to 4·96 copecs per pood, and when fuel costs 20 copecs per pood it amounts to 5·80 copecs. General working expenses are 3·18 copecs. Interest and amortisation of capital amount to 3·74 copecs.

The cost of pumping a pood of kerosene by the pipe line works out as follows:—

	Copecs.
(1) At a cost of fuel of 20 copecs per pood:—	
(*a*) On a total of 60,000,000 poods per annum..	5·69
(*b*) ,, 40,000,000 ,, ,, ..	8·02
(2) At a cost of fuel of 9 copecs per pood:—	
(*a*) On a total of 60,000,000 poods per annum..	5·81
(*b*) ,, 40,000,000 ,, ,, ..	7·72

The committee declared themselves against the granting of any privileges for the transport of kerosene in cases or barrels.

The committee also considered the question of the cost of the export kerosene to the refiners. The representatives of the refiners present stated that it was impossible to determine this figure accurately; the necessity for reduced rates arises from the fact that the export of kerosene has for some time been carried at a loss, and in consequence, the export trade has been steadily declining.

The representative of the Excise Department declared that, according to statistics compiled by his department, the average cost of the kerosene to the refiner in 1905 was 10·08 copecs per pood, whilst the average selling price was 17·81 copecs, leaving a margin of profit of 7·73 copecs. The representatives of the petroleum industry expressed their doubts as to the correctness of these calculations, and explained that as the loss on the exports they take not the difference between the self-cost and the selling price, but the difference between the amount realised for the export oil and the prices ruling on the home markets.

THE BAKU NAPHTHA COMPANY.

The annual meeting of the Baku Naphtha Co. was held at St. Petersburg on the 30th ult. The report submitted by the directors shewed in the past year there were in drilling on the company's Balakhany-Saboontchi properties 27 wells started in previous years and 12 wells started in 1906. The total amount of drilling done was 16,660 feet, against 20,776 feet in the preceding year and 31,598 feet in 1904.

At the land auctions held at Baku, the company was successful in securing the lease of one plot at Ramany for a royalty of 44·14 per cent. The company also acquired several plots from private owners, as the directors considered it necessary in the interests of the company to secure fresh lands. The results of the last auctions have not yet been confirmed by the Imperial Senate. The company has likewise acquired two plots in the part of Bebe-Aibat Bay, which is going to be drained, a small plot at Ramany with three boreholes on it, and three plots at Surachani. Prospecting licenses have been obtained from the Government for three plots at Zycha and one plot at Karachtchur, near Surakhany.

In regard to the admission of the company's shares for quotation on the Paris Stock Exchange, this was arranged at the desire of the French clients of Russian banks, who found it difficult to place the shares in the absence of an official quotation. This quotation involves certain expenses in the form of a French Government tax on the amount of shares in circulation in France. The meeting sanctioned this expenditure.

The meeting approved without discussion the directors' report, and also their proposals for distribution of the profits and the scheme of operations for 1907. The post of managing director at Baku, recently created, was confirmed, and also the appointment to it of Mr. M. P. Korsakoff.

OPERATIONS OF THE PETROLEUM REFINERIES IN AUSTRIA-HUNGARY IN 1906.

In 1906 there were in Austria-Hungary altogether 96 petroleum refineries, which on the aggregate distilled 831,255 tons, against 662,732 tons in 1905. The quantity of illuminating oil obtained was as under:—

	1906. Tons.	1905. Tons.
Illuminating oil:		
For home consumption ..	245,288	236,948
For export	170,818	160,224
Total	416,106	397,172

The proportionate participation of the refineries in the the Austria-Hungarian Monarchy in the above output is shewn below:—

	Crude oil treated. Tons.	Refined oil produced	
		For home consumption. Tons.	For export. Tons.
Galicia and Bukowina (11 large and 50 small refineries)	215,129	83,076	45,068
Austria, Bohemia, Silesia and Trieste (12 refineries)	393,705	74,275	108,419
Hungary and Bosnisch Brod (23 refineries) ..	222,421	87,937	17,331
	831,255	245,288	170,818

It will be observed from the above table that of the total quantity of crude oil treated 25·8 per cent. was taken up by the Galician refineries, 47·3 per cent. by refineries in other parts of Austria, and 26·9 per cent. by refineries in Hungary. For 1905 the proportions were: Galicia, 33·7 per cent., rest of Austria, 42·5 per cent., and Hungary, 23·8 per cent. The Galician refineries have thus in 1906 lost a large part of their share chiefly to the refineries in other parts of Austria and partly to the Hungarian refineries. This must be ascribed to the erection of new refineries in Hungary and in western Austria. The home consumption has in 1906 increased against 1905 by about 10,000 tons, and the export increased by about the same quantity.

MISCELLANEA.

THE PUMPHERSTON OIL COMPANY.

ACQUISITION OF VALUABLE COALFIELDS.

The directors of the Pumpherston Oil Co., Ltd., have acquired an additional property of about 400 acres, carrying a good commercial seam of coal 4 feet in thickness on the estates of Redhouse and Murrayfield, marching with the Seafield estate of that company, and so contiguous to its oil works at Seafield and Deans that these works will be supplied with their requirements of coal without any railway carriage whatever being incurred. This coal is the well-known Hurlet seam and is in good position and very free from faults. This additional coal supply, coming after leasing the coalfields of Woolfords and Viewfield for the Tarbrax Works, guarantees a supply of coal to all this company's works at Pumpherston, Deans, etc., and places them in the unique position of having their supply of coal at their own door. The advantage of this is obvious, in view of the high price of coal in the market, and means a very considerable saving per annum.

◆

MESOPOTAMIAN OIL CONCESSIONS.

In the House of Commons a few days ago, Mr. Bowles asked the Secretary for Foreign Affairs whether he had now received any reply to the inquiry which he had addressed to His Majesty's Embassy at Constantinople, with reference to the concession of the oil deposits in Mesopotamia granted by the Turkish Government on the 4/17th July, 1904, to Mr. K. Zander, as representing the German financial group interested in the proposed Baghdad Railway, and whether this concession was still in force.

Sir Edward Grey: We have no information available to the effect that the contract to which the hon. member refers is still in force.

◆

SOCIÉTÉ PETROLES DE GROSNYI.

The Belgian company of the above name which owns all the shares of the Akhverdoff Co., the leading producer in the Grosny oil field, has published its report and balance sheet for 1906. The results recorded are eminently satisfactory. The accounts shew a profit of 686,000 roubles, or 1,776,000 francs; out of which it has been decided to distribute a dividend of 60 francs per preference share and 35 francs per ordinary share, against 72½ francs and 47½ francs respectively paid in the preceding year.

The report mentions that the Petroles de Grosnyi Co. is interested in a company called Petroles de Roumanie, operating in Roumania, to the extent of 100,000 francs, and in the European Petroleum Union by 1,200,000 marks.

The Petroles de Roumanie, the report goes on to say, is developing the business in a satisfactory manner and boring operations are carried on with great care and energy.

As regards their interest in the European Petroleum Union, the directors explain that it is absolutely necessary for the company to possess an interest commensurate with its production in a distributing company, so as not to be at the mercy of other distributing firms.

◆

THE PETCHORA OIL FIELD.

An inter-departmental conference will shortly commence its deliberations at the Ministry of Commerce and Industry, with Mr. A. A. Schtoff, Assistant Minister, in the chair, to consider the question of the development of the petroleum industry in the Petchora district and of the improvement of the transport facilities by water and other means which it would render necessary.

We have on several occasions referred to the extensive oil fields which are known to exist in the Petchora district in the northern Ural region and which oil fields the Russian Government consider very desirable to develop in the interests of Russian industry. At present private capitalists have already come forward and expressed their readiness to form a company for the exploitation of those oil fields The crude oil produced there could be delivered by pipe line to the river Vyima and thence in tank barges to Rybinsk and St. Petersburg. The cost of the pipe line is estimated at 2,500,000 roubles.

◆

ROUMANIAN PETROLEUM EXPORTS IN THE FIRST QUARTER OF 1907.

The following are the official figures of the exports of various petroleum products from Roumania during the first three months of 1907, compared with the corresponding periods of 1906 and 1905:—

	3 months, 1907. Tons.	3 months, 1906. Tons.	3 months, 1905. Tons.
Crude oil, gas oil, distillate, etc.	8,795	8,739	6,006
Illuminating oil	39,607	37,799	17,446
Benzine	23,704	14,704	11,357
Total	72,106	61,242	34,809

The exports of various products to different countries in the first quarter of 1907, were as under:—

	Crude, Gas oil, distillate, etc. Tons.	Illuminating oil. Tons.	Benzine. Tons.	Total.	
				3 months, 1907. Tons.	3 months, 1906. Tons.
France	1,068	10,876	11,803	23,747	20,790
England	4,064	9,613	2,902	16,579	15,580
Germany	138	4,704	8,837	13,689	12,362
India	—	5,434	—	5,434	—
Turkey	224	4,464	18	4,706	6,442
Austria-Huugary	3,248	—	99	3,347	3,519
Norway	—	2,478	—	2,478	—
Egypt	—	2,038	—	2,038	—
Other Countries .	53	—	35	88	2,543
Total	8,795	39,607	23,704	72,106	61,242

It will be observed from the above figures that in 1907 the Roumanian petroleum export trade has continued to progress, and for the first quarter we have to record an increase in exports by 10,864 tons, or 16 per cent. Practically the whole of this increase falls to the share of benzine.

SOCIÉTÉ FRANCAISE DE PETROLE.

STATUTORY MEETING OF SHAREHOLDERS.

The statutory meeting of the shareholders of the Société Francaise de Petrole was held last week at Winchester House, Old Broad Street, E.C., Mr. G. S. Bergheim, the chairman of the company, presiding.

The Chairman delivered an explanatory address to the shareholders in which he pointed out that the company's solicitor and himself had been to Paris and there seen the officials of the Colonial office. They all seemed delighted at the idea that an English company was going out to drill for oil. All the necessary machinery for the undertaking was practically ready, the only part not being yet finished being the boilers, which were being made in this country. Mr. Bukojemski, who had reported upon the property acquired, was going to take charge of the operations and had already engaged the drillers. Their property they believed to be good; the reports were good, and there was every indication to warrant their belief. But what they did know was that, being oil men themselves, the property would be properly handled.

Sir Boverton Redwood then addressed the shareholders, specially emphasising the advantages which the company had in having as their chairman a man of such ripe and wide experience as Mr. Bergheim.

THE RUSSIAN ARMY COUNCIL AND THE PETROLEUM PRODUCING REGULATIONS.

The Russian Army Council has passed a resolution modifying article 7 of the regulations for leasing out lands for the production of petroleum, within the territories of the Kuban and Terek Cossack armies; this article relates to the levying of a tax on the petroleum producers to cover the common needs of the local industry, and will now read as follows:—

"To these lands shall extend the operation of article 555 of the mining law relating to a tax on petroleum producers, in proportion to their production, on the following conditions:—(*a*) the fixing of the amount of this tax, within legal limits, its method of levying and apportioning among the producers is entrusted to the local association of petroleum producers, subject to the sanction of the Minister of Commerce and Industry; (*b*) out of the proceeds of this tax, apart from the expenses resolved upon by the associations, there must be covered those expenses which have already been recognised or may be recognised in the future by legislation as obligatory to be covered out of such funds."

THE TCHIMION OIL FIELD.

The *Russian Trade and Industry Gazette*, in a recent issue, publishes the following details relating to the development of the Tchimion oil field in the Ferghana province of Russian Central Asia.

In 1906 the output of crude oil amounted to 4,141,000 poods, *i.e.*, an average of 12,000 poods per day. With the exception of about 800,000 poods used at the wells, the whole of the crude oil produced was delivered under contracts to the Central Asian and Tashkent railways.

During the past year seven wells were in exploitation and five were in drilling, while four were inactive. On the 1st January there was on the field a stock of only 120,000 poods of crude oil. In January the output was maintained at the level of 12,000 poods per day. In February the results were less satisfactory, whilst in March the output had declined to about 7,000 poods per day, and this downward movement continued to the the time of writing.

PETROLEUM IMPORTS INTO FRANCE.

The imports of petroleum products into France during the first three months of 1907, compared with the corresponding quarter of 1906, were as under:—

	3 months, 1907.		3 months, 1906.
	Tons.		Tons.
Crude petroleum oils (by weight) ..	5,468	..	2,547
	Hectol.		Hectol.
Crude petroleum oils (by volume) ..	620,000	..	538,200
	Tons.		Tons.
Illuminating oil and petroleum spirit (by weight)	47	..	—
	Hectol.		Hectol.
Illuminating oil and petroleum spirit (by volume)	851,000	..	311,800
	Tons.		Tons.
Heavy oils and residuals (by weight)	22,858	..	20,420

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CLASSIFIED IMPORTS INTO UNITED KINGDOM UP TO MAY 6th, 1907.

IN GALLONS.

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COUNTRY.	ILLUMINATING.		LUBRICATING.		RESIDUALS.		GAS OIL. (Solar)		BENZINE.		FUEL OIL.		OTHER DESCRIPTIONS.		TOTALS.	
	Since Apr. 22.	From Jan. 1.	Since Apr. 22.	From Jan. 1.	Since Apr. 22.	From Jan 1.	Since Apr. 22.	From Jan 1.	Since Apr. 22.	From Jan. 1.	Since Apr. 22.	From Jan. 1.	Since Apr. 22.	From Jan. 1.	Since Apr. 22.	From Jan. 1.
Austria ...	—	—	—	61,640	—	67,770	—	—	—	—	—	—	—	—	—	129,410
Belgium ...	—	153,410	8,460	192,720	—	—	—	—	—	—	—	—	—	590	8,460	346,720
Canada ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dutch India.	—	—	—	—	—	—	—	—	—	6,553,670	—	—	—	—	—	6,553,670
Germany ...	11,440	1,127,830	61,740	545,960	—	2,000	—	—	—	80	—	—	—	2,200	73,180	1,678,070
Holland ...	—	920	1,270	4,710	—	—	—	—	50,000	241,250	—	—	—	47,010	51,270	293,890
Roumania ...	1,244,700	3,660,810	—	—	—	—	—	1,964,000	—	1,459,000	—	238,700	—	—	1,244,700	7,322,510
Russia ...	1,494,400	10,930,010	571,900	2,081,670	—	—	—	—	—	2,400	—	—	—	120	2,066,300	13,014,200
U.S.A. ...	997,740	30,436,890	1,285,380	14,024,080	14,000	448,690	1,298,460	17,184,950	—	1,375 780	—	1,332,000	42,290	644,780	3,637,870	65,447,170
Other Countries	320	580	860	16,750	—	—	—	—	—	2,500	—	40	—	840	1,180	20,710
	3,748,600	46,310,450	1,929,610	16,927.530	14 000	518,460	1,298,460	19,148,950	50,000	9,634,680	—	1,570,740	42,290	695,540	7,082,960	94,806,350

THE BURMAH OIL COMPANY, LIMITED.

ANNUAL MEETING OF SHAREHOLDERS.

The fifth annual general meeting of the members of the Burmah Oil Co., Ltd., was held at the Masonic Hall, 100, West Regent Street, Glasgow, on Friday, the 26th day of April, Mr. John T. Cargill, chairman of the company, presiding.

After reading a letter from Mr. Leonard Gow stating that he would be unable to be present at the meeting, and after getting the approval of the meeting to the directors' report, balance sheet, auditor's report and notice calling the meeting being held as read, the Chairman said :—

At the last annual meeting I ventured to express the hope that, when the time came round, your directors would be able to submit a satisfactory report for the year 1906, and it is a great pleasure to me that that hope has proved to be well founded. I am indeed in a position to-day to refer to what all must agree with me in styling "a very satisfactory report and statement of accounts." The gross profit on the year's working, including £10,591 1s. 2d. brought forward, amounts to £578,155 17s. 8d., as compared with £324,663 8s. for the previous year, and this is after making very ample provision for depreciation on fields, tankers, installations, pipe lines, etc., and placing £85,000 to the fields reserve account, which your directors have considered it prudent to open.

This satisfactory result is in a large measure due to the fact that during the year we have continued to enjoy the blessings of peace in the oil trade of India, thus permitting the price of kerosene oil to be maintained at a reasonable and remunerative level. On the cessation of hostilities prices gradually returned to what I may call their normal level, and all attempts to unduly inflate them at the expense of the consumer were most carefully avoided. To your directors, indeed, one of the most gratifying features of the year has been the healthy growth of consumption of kerosene all over India, as compared with the preceding war period, when the same markets were being flooded with oil from all parts of the world regardless of cost, because it bears testimony to the fact that the policy that we had set ourselves to accomplish was and is the best policy for our shareholders.

The directors have all along pursued a consistent policy in the building up of a strong reserve fund, and they are confident that their proposal to place £100,000 to general reserve will meet with the hearty approval of the shareholders. The amount at the credit of general reserve will then be £340,000, in addition to which there is the £80,000 at the credit of capital reserve.

The customary £15,000 has been placed to insurance fund, and the marine insurance fund is increased by nearly £10,000.

The directors regret the necessity for writing down investments, but, as explained in the report, the operations of the oil and exploiting companies in which it was considered advisable that the Burmah Oil Co. should be interested, have not proved as successful as it was thought they might be, and it is therefore necessary to write down the book value of these investments.

The Concessions Syndicate has continued to encounter many difficulties and delays in connection with its operations in Persia, and drilling is not yet sufficiently far advanced to admit of any definite conclusion being arrived at in regard to the territory being tested.

In Burma it is somewhat disappointing that, in spite of the vigorous prospecting work that has been carried on during the past year over large tracts of country where the geological conditions seem to hold out hopes of oil being found, no success has yet attended these prospecting operations, but the directors are in no way discouraged, and the search for fresh oil-bearing land will continue to be actively prosecuted. In the older fields development work continues to give on the whole satisfactory results, and the supply of crude oil continues ample for all requirements. Not only has the whole cost of prospecting and development work during the year, as well as past expenditure on some districts now finally abandoned, been written off out of revenue, but the directors have considered it prudent to open a fields reserve account, and place £85,000 to same, a step which they feel sure will meet with the approval of the shareholders.

The amount added to refineries, etc., account is almost entirely accounted for by the expenditure during the year on the Navy fuel works. These works are now completed and in full operation, and should prove a valuable national asset.

The company's five tank steamers have again done a splendid year's work, free from mishaps of at all a serious nature. Considerable additions have been made to the distributing installations in India, thus facilitating and cheapening the distribution of the company's products there. The sum of £51,213 17s. 11d. placed to depreciation of tankers, tank, installations, etc., is, it will be seen, on an ample scale. In this connection stocks of stores in tankers and at tank installations are now shown separately in the balance sheet, as no depreciation has to be allowed for on these.

Stocks of products and of stores in Rangoon and at all agencies are also now shewn separately. The combined total shews the substantial reduction of £153,819 12s. 8d. as compared with 31st December, 1905.

The directors' decision to proceed with the laying of the main pipe line for the conveyance of the crude oil direct from the fields to the refineries was communicated to the shareholders in the circular dated 27th December last, and I have really nothing to add to the explanations regarding the scheme given therein. The shipment of the pipe is now being proceeded with, all arrangements for laying the line are well in hand, and it is anticipated that it will be working by 31st December, 1908.

The remaining 25,000 six per cent. £10 second preference shares issued to provide a portion of the funds necessary to carry out this scheme, and offered to the shareholders of the company, were largely over applied for, and alloted to applicants *pro rata* to their share-holding in the company. The balance of the cost of the line will be paid for out of funds in hand, and it is expected that not more than £350,000 will be required to meet this.

The amount of cash on deposit and in bank—£791,837 1s. 10d.—shows the substantial increase of £475,172 10s. 4d. as compared with 31st December, 1905, and I am sure it will be a source of gratification to the shareholders, as it is to the directors, to see such a large proportion of the company's reserves in a thoroughly liquid form. The bulk of this money has been, and still is, deposited with leading banking establishments in London at good rates of interest, and it will be observed from the profit and loss account that interest account contributes the satisfactory amount of £19,126 2s. 7d. to the company's profits.

I would ask you to authorise me to convey to the managing agents in Rangoon and our agents in India, and to the staff at the works, the officers of the fleet and the staff at the oil fields, your hearty thanks for the splendid work they have done for the company during the past year. I need hardly say that much of its prosperity is due to the able manner in which they have discharged their various duties, and to their untiring zeal and energy on its behalf.

You will have seen in the report what it was found necessary to do in regard to constituting a local London Board. I do not think that I need waste your time by amplifying those remarks by others which must be obvious to those of you who are accustomed to handling large affairs. I allude to the matter again, however, in order to obtain the opportunity of personally introducing to you Mr. H. S. Ashton and Mr. T. B. Bowring, who have come from London to be with us to day.

As regards the current year I am glad to say that prospects are favourable. So far all our products have gone steadily into consumption at satisfactory prices, and it seems reasonable to hope that, in due course, the directors will be able to submit a favourable statement of accounts.

I have again to thank our most able and eminent Technical Adviser—Sir Boverton Redwood—for his presence here to-day. Sir Boverton has always taken something more than a mere professional interest in our welfare, as is evidenced by his regular attendance at our meetings, often at considerable inconvenience to himself. On this occasion he has kindly consented not only to give you information on technical affairs but to answer any questions that any shareholder may care to ask in connection with same. I will now call upon him to address you, and I am sure that you will give him a hearty welcome.

Sir Boverton Redwood then addressed the meeting. He said:—I very gladly accede to the request that I should address to you a few remarks on matters which fall within my province as Technical Adviser of your company. The results of the past year's operations are obviously such as you may all be warmly congratulated upon, and they reflect the highest credit on all concerned in the administration of this company. But speaking with an experience now, I am sorry to say of not far short of forty years of work of this kind, I cannot too strongly commend the cautious and guarded utterances of your chairman in respect of the future prospects and the conservative policy of the board in dealing with the profits of past work. The petroleum industry is essentially one in which the most ample provision must be made for all contingencies, expected and unexpected, and no other policy should commend itself to those who are concerned in such work. On the other hand, I feel that the policy of the board would fail in one of its legitimate objects if, instead of creating confidence in your minds in the stability of your undertaking, it were to lead to the impression that there are any discouraging or unfavourable features in the prospects in future in respect of the continuity of your supply of crude oil, on which, after all, everything is necessarily based. It is true that as stated in the report, no success has yet attended the search which is being made for additional productive territory, but, on the other hand, I wish most strongly to emphasise the fact that the yield of the proved fields continues to be most satisfactory, and especially that some of the later work has opened up an additional area of productive land. I may say to you, gentlemen, without qualification and with the fullest confidence, that never before in the history of this remarkably successful undertaking has there been so large an extent of proved oil-bearing territory now ready and available for development or exploitation, and that, on this basis alone, an ample supply of crude oil is assured to you for many years to come. I don't wish to take up your time with any further remarks. I have endeavoured in what I have said to cover the ground generally, and, as the chairman has intimated to you, if there are any questions on technical matters which you desire to put, I shall be happy to do my best to give an answer to them.

The Chairman—I now beg to propose that the report of the directors and audited statement of accounts, including balance sheet and profit and loss account to 31st December, 1906, presented to this meeting, be, and the same are, hereby received, approved, and adopted; but before asking Mr. King to second this motion I shall be pleased, should any shareholders desire to make any comment or to ask any question regarding the matters before the meeting, if they will do so now.

No shareholders having risen to ask questions or make observations, the chairman called upon Mr. King to second the resolution already proposed. Mr. King having formally seconded the resolution it was unanimously adopted.

Mr. F. A. Macquisten moved that those of the directors who were not remunerated otherwise than by their ordinary directors' fees should receive an extra £200 each for their services last year in view of its having been so prosperous. This motion, having been seconded, was agreed to unanimously.

On the motion of the chairman, seconded by Mr. R. W. Raphael, the following dividends and bonus recommended by the directors were approved of and declared, payment thereof to be made on 1st May, 1907:—

1. On the 6 per cent. first preference shares of £1 each—

   7⅕d. per share (equivalent to 6 per cent. per annum from 30th June to 31st December, 1906), less income tax;

2. On the 6 per cent. second preference shares of £10 each—

   6s. per share (equivalent to 6 per cent. per annum from 30th June to 31st December, 1906), less income tax; and

3. On the ordinary shares of £1 each—

   (*a*) 2s. per share (equivalent to 20 per cent. per annum from 30th June to 31st December, 1906), free of income tax; and

   (*b*) Bonus of 1s. per share, free of income tax.

Messrs. M. Tarbett Fleming, Robert King and R. W. Adamson were re-elected as directors, and Mr. R. A. Murray, C.A., was re-elected as auditor of the company, his remuneration being increased to 150 guineas.

This being all the business, the Chairman thanked the shareholders for their attendance, and the proceedings closed with a vote of thanks to the chairman for his conduct in the chair.

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Hon. Mem. Am. Phil. Soc.; Hon. Mem. Imp. Russ. Tech. Soc.; Adviser on Petroleum to the Admiralty and Home Office; Consulting Adviser to the Corporation of London under the Petroleum Acts; Adviser on Petroleum Transport to the Thames Conservancy.

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SATURDAY, MAY 11TH, 1907.

THE OIL FREIGHT BOOM.

ONE of the most distinctive features in connection with this country's oil trade at the present time is the boom in oil freights—a matter which throughout the City is receiving liberal discussion on the part of oil men. Whenever the demand for shipping falls below par, and oil freights decline to that fine point which marks the difference between profit and loss, one can almost with certainty come to the conclusion that there are bad times in store for everybody concerned, and, following the natural order, therefore, it must be admitted that a boom in oil freights, such as is at present being experienced, is not without its suggestion of good times ahead. The immediate impression, of course, is that the demand for oil is so pressing that a dearth of freights has been brought about, and to a great extent this is the case, but there have been other, and perhaps quite as important matters which have gone a long way to create the present boom. That this is no temporary freight advance is seen on all hands, for not only are rates to-day more than double what they were, say, a few months or a year ago, but forward chartering is being done at figures quite 100 per cent. higher than those prevailing this time last year.

It is a long story to narrate the events which have brought about this period when people are clamouring for tankers at 20s. per ton. When the industry had not attained its present large proportions, and when the carrying of oil in bulk was still a novelty, the oil tankers engaged in catering for this country's oil trade could be counted almost upon the fingers of one's hand. With the expansion of England's oil business, however, and also the extension of the oil interests beyond the seas, oil tankers began to grow in number as they did in size, and so far as the English trade in bulk oil was concerned, it is a matter of history that oil tankers were built far ahead of the demand, so much so that during the early months of 1901 seven or eight tankers were laid up in the Tyne at one time. But matters righted themselves in due course, and the rapid development of the Borneo fields, combined with the strengthening of America's export oil trade with this country, brought about a long period of normal prosperity. The demand for oil tankers than ran parallel with their construction, and freights enjoyed an uninterrupted run on prices which were just remunerative.

But that quietude has been broken by a "boom" period which in its character is absolutely unprecedented in the annals of oil freights. For months past there has been no mistaking its dawn. Its approach was heralded by the rumours of another competitor for the European markets—a competitor from America. For some time there were rumours in the air and nothing more, but the announcement that the Union Oil Co. of California was to make a bold bid for European trade by the construction of an Isthmus pipe line and securing a fleet of oil tankers for cross-ocean journeys, put all doubts to rest as to what would be the ultimate result. Then came enquiries upon the English market for large oil tankers for American trips, and from that moment the oil freight boom—fostered by a chain of favourable circumstances—began to grow. Almost simultaneously with the appearance of the Union Oil Co.'s representatives in England in search of oil tankers, the Anglo-American Oil Co. were also endeavouring to add to their tank fleet. The coincidence of the two above-mentioned facts no doubt led many to set up the argument that the present freight boom was artificially brought about in an endeavour to prevent a new competitor gaining a foothold in European circles, but all reasonably minded oil men must at once dismiss such thoughts as illogical and absurd. It is a well-known fact that enormous as is the Anglo-American Oil Co.'s tank fleet, the great progress which has been made quite recently by the Standard Co. in its trade between the Californian Coast and the Eastern markets, has rendered it imperative that other tankers should be acquired, and if corroborative evidence is wanted upon this point, we have in the fact that at the present moment orders are being placed by the above-mentioned firm for the building of a couple of oil tankers in English shipbuilding yards.

Other firms engaged in the English oil transport business are likewise feeling the growing necessity for securing additional vessels to carry oil in bulk, and many of them have already given out orders for execution as soon as possible.

There has been, as may readily be surmised, a feeling for some time prevalent that this freight boom would soon mature and make itself very forcibly felt on the market, but few there are who conjectured that the boom would assume such an important, and one might almost say semi-permanent, character as it does to-day. Without doubt, it has been assisted by the recent loss of the "Silverlip" and the "Lucifer," which alone have taken away about 120,000 tons per annum of carrying capacity from the market, but, quite apart from these sad misfortunes, we should to-day have been in the midst of a "boom" with freights just as high as we now find them.

It is always difficult to prophecy, but there seems every reason for believing that freights will remain at the figures at present prevailing at least for many months to come. The new tankers that are about to be built will not leave the stocks for over twelve months, some even later, and, in the meantime, the demands of the petroleum industry will require additional ocean transport accommodation, even before such can be furnished.

Such times as the present are naturally welcomed by those engaged in the shipbuilding and brokerage business, but it must be remembered they are by no means an ill omen for the firms engaged in the oil distribution business, or for the oil trade as a whole. They clearly suggest that the petroleum industry is stretching out to greater bounds, and that, like a growing child, its increasing size is one of those matters which cannot be ignored. It is not for us to commend monopoly in regard to the claims of oil transport, for in such a case the re-action would be little short of disaster to the oil trade and freights would be brought down to a level which would be far from remunerative. In the present case, however, we are most decidedly of opinion that monopolistic intention has been quite beside the point at issue. The plain fact is, as we have already said, that our industry is growing, and those various branches of commerce allied with it must also grow. Here is the difficulty: the growth has never been in ratio, and we doubt if it ever will. It goes by fits and starts.

The oil tanker business has been made up of a succession of spasmodic jumps, and this is one of them. But the present boom has come at the right moment, for expansion is not only necessary, but inevitable, and until that is brought about we must, inasmuch as we are calling the tune, also pay the piper.

THE GALICIAN OILFIELDS.

MR. BRUNO SAND, of Lemberg, Galicia, is open to furnish detailed information concerning Galician Oil Matters.

Enquiries should be directed to—

BRUNO SAND,
c/o Gal. Hypothenken Bank, Lemberg, Galicia.

THE OIL MARKETS OF THE EAST.

(Concluded from page 240.)

A REVIEW OF OPERATIONS DURING 1906.

(From the "Neftiannoie Dielo.")

The imports of American kerosene in 1905 and 1906 were as follows (the quantity of the bulk oil imports being translated into cases): -

	1906.	1905.
In cases	1,300,000	4,500,000
In bulk	1,550,000	1,150,000

Until 1905 the Standard Oil Co. imported case oil only, now they are gradually replacing it by bulk oil imports. The pioneers of the bulk oil trade in the Far East were the importers of Dutch-Indian oil, the "Shell" Co., Royal Dutch Co., and their allies. It offers considerable advantages; it reduces the cost of transport; the loss by leakage is smaller when the oil is stored in tanks than in cases; and lastly, owing to cheap labour and cheap timber the packing in tins and cases is cheaper.

Whilst, in former years, the imports of Russian kerosene were very considerable, last year it was not imported at all; a small quantity of Russian oil was sold from the stocks which were left over from the preceding year. The importers of Russian oil, looking forward to an improvement in prices, at one time refrained from selling, but in the end they were compelled to sell their stocks at a considerable loss, resulting from leakage during the long period of storage. By the end of the year their stocks were completely exhausted.

The following were the quotations of kerosene at the beginning and the end of 1906:—

	At the beginning of 1906. Taels.	At the end of 1906. Taels.
American kerosene, in cases	1·65–1·68	1·68–1·70
American kerosene, in bulk	0·95--0·97	0·99–1·00
Dutch-Indian oil, in bulk	0·95–0·97	1·00–1·01

During the first half of the year the price of American oil fell to 1·62 to 1·63, but in July-August it rose to 1·67 to 1·69. The Dutch-Indian product in August-September went up in price to 0·99 to 1·02. In October there was a general decline in prices: American case oil fell to 1·60 to 1·62; American bulk oil to 0·90 to 0·92: Dutch-Indian bulk oil to 0·97 to 0·99.

Although during the year fluctuations were frequent, they were within a narrow range, and prices were steady throughout the year. The low prices which ruled during the year assisted in developing the use of illuminating oil among the Chinese population, the majority of which are still using, for lighting purposes, vegetable and other oils.

The port of Shanghai is the most important for the supply of China with petroleum products. The illuminating oil imported into Shanghai is sold to Chinese merchants, who send it to the markets of the interior and also to those parts of the Chinese coast which are still closed to foreign trade. From Shanghai considerable quantities of kerosene are also sent to Tientsin, Vladivostock, etc.

The consumption of kerosene in China, generally speaking, is still quite insignificant. It could have developed to enormous dimensions if trade outside the treaty ports had not been prohibited to foreigners and if it was possible to organise the distribution of the oil in the interior after the manner adopted in civilised countries.

Japanese Markets (Yokohama).

In their desire to promote the interests of the home petroleum industry the Japanese Government have raised the import duty on kerosene to 67s. per ton. During the last few years the production of crude oil in Japan on the average amounted to 120,000 tons per annum. The illuminating oil produced from this crude oil, which is inferior in quality not only to American and Russian, but also to the products of the Dutch-Indian refineries, is far from sufficient to cover the needs of the country. Nevertheless, the difference of 67s. per ton in favour of the Japanese producers is a powerful stimulus to the development of the production of crude and the refining of its products. On the other hand, the import duty on crude oil being less by half than the duty on refined oil the Japanese refiners are able to increase their output by importing and refining foreign crude oil. This is the basis of the contracts recently concluded by Japanese refiners with the Union Oil Co. of California and the Graciosa Oil Co. for the supply of enormous quantities of Californian crude oil.

During 1906 the imports of petroleum into Japan were exclusively from the United States and the Dutch-Indian Islands. The imports from Russia, which declined greatly in 1905, disappeared entirely in 1906. The imports from the United States, on the other hand, in 1906, shew a considerable increase against 1905. In 1905 the imports from the United States amounted to 3,900,000 cases, whilst in 1906 they were 4,500,000 cases. The increase in the American imports was assisted largely by the reduced supply from Dutch-India.

The tendency to replace case oil imports by bulk oil is also observed in Japan. Last year, following the example of the "Shell" Co., which has for some time been importing Dutch-Indian and Russian kerosene in bulk only, the Standard Oil Co. started to build extensive tank storage installations and a case factory. The Standard Oil intends to ship the bulk oil to Japan, the same as to China, chiefly from California.

The kerosene market at Yokohama during the last year was fairly firm, and prices remained high throughout. In January the prices of various products were:—

American kerosene, in cases	3·40–3·45	yens.
Russian ,, ,,	3·14	,,
Dutch-Indian kerosene, in bulk	2·55–2·58	,,

Russian kerosene (stocks left over from the preceding year) soon fell in price to 2·10 yens, whilst the price of other oils remained unchanged till August. In August and September Dutch-Indian oil declined to 2·05–2·15 yens, but in the following months right up to the end of the year the market had an upward tendency, but changes in prices were few. The year closed with a firm tone at the following prices:—

American kerosene, in cases	3·55–3·57	yens.
Dutch-Indian kerosene, in bulk	2·54–2·57	,,

THE IRISH INTERNATIONAL EXHIBITION.

The great Irish International Exhibition opened its doors last Saturday in a palatial range of buildings in Pembroke Park, Dublin. Though considerable work has yet to be done before the Exhibition can be said to be quite complete, it can at this stage safely be said that there is much to be seen which will be instructive to oil men. Both in the Machinery Hall and the Gas Pavilion, there are a number of exhibits which are so closely allied to the petroleum industry as to deserve special mention here, but a perambulation through the extensive buildings cannot fail to impress one with the idea that the present is but another opportunity that has been lost by which the petroleum trade might have put on a bold front to shew what can really be accomplished by means of oil.

If there is one portion of our Empire where petroleum for illuminating and heating purposes ought to have a very firm hold, especially upon the rural population, it is in Ireland, where by reason of the scattered nature of the villages, other powers of illumination are either expensive or very difficult to obtain. Even there, however, the consumption of petroleum is not what one might have desired to see.

The only large distributing oil organisation exhibiting is that of the British Petroleum Co., who have a large and well arranged show case in the Gas Pavilion, this exhibit being of special attraction to manufacturers of carburetted water gas. A series of photographs here illustrate the methods of transport and storage of oil, while models of the company's railway tank waggons and road cars are also on view, together with a number of samples of refined oils and distillates.

In the Palace of Mechanical Arts, is to be seen the Petrolite system of lighting. This system, due to the ingenuity of Mr. Scott Snell, has been referred to in past issues of the Review, but it may be recalled that the system is applied to lighting by means of air carburetted with petrol.

Messrs. Samuel Cutler and Sons, of Millwall, E., have an exhibit which consists wholly of an extensive range of photographs illustrative of the various works the firm has carried out. Large oil tanks and carburetted water gas installations are shewn, while examples of general constructional engineering are also on view, including large span roofs and jetties, such as those constructed by the firm on the Thames.

On the stand occupied by Messrs. Clayton, Son and Co., of Leeds, are numbers of steel welded pipes, and in view of the extended use of these in connection with the petroleum industry, more than ordinary interest will attach to the exhibit.

As we have said, however, there is a conspicuous absence of the majority of those firms whose interests are closely allied with the petroleum industry – an absence which will be all the more regretted as time goes on and the exhibition gets in full swing.

THE FORTHCOMING PETROLEUM CONGRESS AT BUCAREST.

In reproducing our leading article of a few weeks ago in the *Old City Derrick* upon the forthcoming Roumanian Congress, the editor of that influential journal makes pointed reference to the importance of the International gathering from an American point of view.

The United States, he says, must be well represented at this Congress. We produce more petroleum than any other country in the world, and our refined products are sold everywhere. We were the first to make petroleum a commercial product of international importance, and our oil is the standard of excellence in every place where it finds a market. America, therefore, cannot afford to ignore the International Petroleum Congress at Bucarest.

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IMPROVING THE PORT OF LONDON.

THAMES HAVEN A NEW CENTRE.

As we say in our editorial columns, to oil men belongs the credit of propounding the first really practical scheme for the improvement of the Port of London, for the London and Thames Haven Oil Wharves, Ltd., who possess the freehold of a valuable piece of land, over 60 acres in extent at Thames Haven, are about to make Thames Haven a centre for ocean-going goods and passenger traffic.

The proposal, in brief, is to construct wharves and jetties for loading and unloading goods, as well as to provide for passenger traffic, and the construction of a dry dock. The proposal has been pushed forward so far that the Thames Conservancy at their meeting held last week gave the necessary permission to the company to construct two jetties connected by a gangway 630 feet long. The upper jetty is to be 1,080 feet long and carrying three warehouses, and the lower jetty will be 1,790 feet in length, this being fitted with transport sheds throughout its whole length. Sanction has also been given to the Thames Haven Wharves to embank the existing triangular recess on a frontage of 900 feet, and to make a cutting through the river wall to form entrances to a large basin and a dry dock which it is proposed to excavate within the limits of the property.

The land, it should be mentioned, is the only land within the Port of London which has water alongside deep enough to accommodate the largest vessels afloat at any state of the tide. It is bounded by the London and Tilbury Railway on the inland side, and thus this new centre of traffic is within easy access of London and the Midlands. Another point in favour of Thames Haven is that being at the estuary of the Thames, the various ingoing or outward bound vessels are saved traversing those tortuous bends of the river which have to be navigated in getting up to Tilbury.

It is an open secret that the Belgian railway authorities have in contemplation the partial diversion of their Ostend-Dover mail steamers to the Thames, and it is therefore extremely likely that they would welcome the facilities for a cheap and rapid service that would be afforded at Thames Haven. It is computed that a saving of half-an-hour on the Queensborough mail service could be effected, and the delays due to threading the winding channels of the Medway avoided.

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THE "SHELL" TRANSPORT AND TRADING COMPANY, LIMITED.

ORDINARY SHARE CAPITAL TO BE INCREASED.

Mr. E. A. Smith Rewse, the secretary of the "Shell" Transport and Trading Co., Ltd., has sent to the shareholders the following circular, bearing date of the 2nd inst.:—

Dear Sir/Madam,—With reference to the enclosed notice convening an extraordinary general meeting, I am instructed by the board to inform you that they are asking the shareholders to sanction the increase of the ordinary share capital of the company by the issue of 500,000 new ordinary shares of £1 each.

The object is to provide such cash as may be required under the scheme for the amalgamation of the interests of this company with those of the Royal Dutch Co., to furnish the necessary working capital, and to discharge the outstanding liabilities of this company, as indicated in the speech of the chairman at the last meeting.

It is further necessary to provide the cash required to discharge the "Shell" Company's share of the purchase price of other properties which have been acquired since the date of the original scheme. The directors consider that the acquisition of these properties is highly advantageous to the interests of all parties.

It is intended to issue such shares, if authorised, only when occasion requires, and that all shareholders shall, so far as practicable, participate in the issue in proportion to their holdings at the date of such issue.

I am instructed to enclose a form of proxy, and to request that you sign and return the same to me at this address at least two clear days before the date of the meeting, unless it is your intention to be present thereat.

The meeting will be held next Wednesday, at Winchester House, E.C., at 2.30 p.m.

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THE BROXBURN OIL COMPANY, LIMITED.

REPORT OF THE DIRECTORS.

The report by the directors of the Broxburn Oil Co., to be submitted at the thirtieth annual general meeting of the company next Wednesday, states that after paying all current charges, the balance at the credit of profit and loss account (including £3,033 8s. 1d. brought forward from the previous year) is £79,086 14s. 3d., and the directors recommend that this sum be disposed of as follows: –

(1) In writing off the usual depreciation of five per cent. on the net balance of capital expenditure as at 4th April, 1906, £13,785 14s. 5d.; (2) In payment of a dividend at the rate of six per cent. on the preference shares of the company, £6,000; (3) In payment of a dividend at the rate of fifteen per cent. on the ordinary shares of the company, free of income tax, £29,962 10s.; (4) In payment of income tax on dividend on the ordinary shares, £1,498 2s. 6d; (5) To credit of retort renewal account, £22,155 16s. 3d.; (6) Sum to be applied in writing down Consols, £3,180; (7) In carrying forward a balance of, £2,504 11s. 1d.; or a total sum of £79,086 14s. 3d.

In view of the depreciated value of Consols, the directors think it prudent that the company's holding, which has hitherto stood in the balance sheet at the cost price of £49,829 14s. 10d., be written down by the sum of £3,180.

In accordance with the request preferred by shareholders at last annual general meeting, each of the 23,000 ordinary shares of the company, of the nominal value of £10, with £8 10s. per share paid up thereon, was, by special resolution of the company, sub-divided, in February last, into 10 ordinary shares of £1 each, with 17s. per share credited as paid up thereon, and numbered consecutively 1 to 235,000. New share certificates have been issued to the shareholders for the shares resulting from that sub-division.

The refinery renewal and extension work mentioned in last report has been satisfactorily completed.

In order to reduce mining costs by keeping the company's mines fully employed, the directors have sanctioned the erection of another bench of retorts at Broxburn crude works, and this bench is now in course of construction. Mines are also being presently driven, with the object of opening up the Dunnet seam of shale, which underlies a large portion of the company's northern mineral field. These operations will necessarily involve considerable capital outlay during the current year.

The stocks in hand and in process of manufacture have, as usual, been taken into the balance sheet at low rates.

During the year prices of products were, in the aggregate, somewhat better than in the previous year. Although sulphate of ammonia did not maintain its position, burning oil and other liquid products realised rather higher figures. Paraffin wax prices were on a par with the price of the previous year, but candle business was, and still is, in an unsatisfactory state, owing to the persistent under-selling on the part of some makers. This has unfortunately resulted in one of the leading candle makers issuing contract price lists at a lower margin over the price of wax material than has ever previously been experienced in the trade.

Apart from candles, however, wax prices for next season are likely to be somewhat better, and higher prices are also anticipated for all liquid products, which in some measure will compensate the advances which have already been made in miners' wages and the price of coal.

The directors have to record with deep regret the death of their esteemed colleague, Mr. James Beckett, whose financial experience was of great service to the company.

To fill the vacancy caused by Mr. Beckett's death, the directors have pleasure in stating that they induced Mr. James S. Dixon, LL.D., M.E., a very old shareholder of the company, to join the board. They feel that his intimate and extensive knowledge of mining matters will be a distinct strength to the company.

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Change of Address.—We are informed that Messrs. I. Mantacheff and Co., whose London offices have hitherto been at 118, Fenchurch Street, E.C., have now removed to 84, Bishopsgate Street Within, E.C., to which address all communications should now be sent.

Telegraphic Address:—"OLEINE."
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THE MAKING OF DRILLING TOOLS IN ENGLAND.

A Visit to the Deep Well Tool and Boring Company's Works at St. Albans.

The establishment of extensive works in this country for the manufacture of all drilling tools and other appliances directly associated with the industry of oil exploitation marks the commencement of a period when the United Kingdom will occupy a far more favoured place in this regard than has been the case in the past. Therefore the present moment is opportune for making more than a passing reference to the subject.

The English nation has always taken a keen interest in the search for petroleum in almost all the fields of the world, and the result is that a most conservative estimate would place the amount of British capital invested in oil enterprises, in one form or another, at over £20,000,000. When one recollects that quite 90 per cent. of the capital expended in the necessary plant upon an oil field goes to the purchase of appliances connected with the boring of the wells or equipment for their working, it is indeed strange to find that in the past practically the whole of such plant has had to be contracted for in foreign countries, England being content with almost an infinitesimal proportion. There may, of course, be a great reason why operating companies have sought the assistance of foreign manufacturing firms, for actual experience in oil field requirements plays so important a part in the manufacture of the necessary tools that unless there was this combination of engineering and technical knowledge, numberless difficulties would beset the paths of those concerns who set out to seriously search for oil.

But England is no longer to remain in the background in respect to the manufacture of everything that is required for oil-field work. Two gentlemen, whose experience of all branches of oil-field work in the various fields of the world places them in quite unique positions —we refer to Messrs. Growder and Mackenzie—have recently established the Deep Well Tool and Boring Co., at St. Albans, and are now maturing plans, the result of which will be that in a short time they will be able to carry out the manufacture of every appliance necessary for the successful exploitation of petroliferous territories.

We have laid stress upon the necessity of their being a combination of knowledge of oil field work in regard to the manufacturing of oil field plant, and therefore it may be well to refer very briefly to the experience of both partners. Mr. Growder has been engaged in field work for about 22 years, having had charge of the drilling operations for many companies both in India and Canada. Ten years were spent in the fields of India, while latterly he had complete charge of the drilling operations for an important company there. Like Mr. Growder, Mr. Mackenzie, too, is a Canadian, both gentlemen having been born in the centre of the Canadian oil industry, Petrolia. For the past quarter of a century he has been connected with boring operations in Canada, and in his capacity of superintendent of works for the Oil Well Supply Co. there, he is naturally thoroughly acquainted with the technicalities of the manufacture of drilling tools and machinery. During his long association with the petroleum industry, Mr. Mackenzie has had charge of the supply of plant to many English companies operating in all parts of the globe. He has been personally connected with the producing business, and at the present time is associated with a company drilling test wells in British Columbia. Thus the two gentlemen are eminently well fitted to carry to success the business they have taken in hand.

The new works, to which reference has already been made, have been erected upon a most favourable site just outside the St. Albans city boundary, and the ground acquired is of such an area as to permit of considerable extensions to the buildings when these are necessary. A private siding runs to the works from the Midland Railway Co.'s main line to the north, and so the neceesary tools for shipment under contract can be transported with the greatest dispatch. The buildings —all of which are very commodious brick structures— are three in number, each being connected with the other by sliding doors. They consist of the power-house, the forging department, and the finishing and erecting shop, the latter being the most interesting department to the visitor by reason of the numerous up-to-date American machines which have been installed, all of which have been necessary in order to guarantee the work turned out being of all-round general excellence.

Practical experience in the oil fields in the use of various drills has taught Messrs. Growder and Mackenzie that one of the most essential things to success in drilling is to have tools that can in every particular be thoroughly relied upon. The best possible materials should be used in the drill, otherwise those expensive fishing jobs which follow the breaking of a bit or the snapping of the sinker-bar are bound to frequently occur. Therefore Low Moor iron is largely used in the construction of tools which leave the St. Albans works, a fact which in itself will be a guarantee that when a string of tools goes into a hole they will come out again intact.

England being the home of very superior iron and steel, the firm will be placed in an advantageous position in this respect.

One often hears of various tests in oil-field work which have had to be abandoned as the result of the loss of tools, but happily these misfortunes are on the decline, thanks to the growing desire among all parties that the tools used shall be of that strength which will warrant completion of wells without resorting to those vexatious and very expensive fishing jobs.

All kinds of tools required for the boring and equipment of wells are to be manufactured on the spot at St. Albans and according to any specification, and thus it is not too much to say that in the future a considerable proportion of the requirements of the English operating companies on the Continent will be satisfied without the necessity of having to go, as has been the case hitherto, to the other side of the Atlantic.

The Canadian system of boring is to be the firm's speciality, the experience of both Mr. Growder and Mr. Mackenzie being that it gives the greatest satisfaction there being nothing to equal it in difficult territory. As to the rotary system, experience has told them that this is very successfully applied in soft alluvian formations where there is no rock to contend with, but where a broken strata is encountered, its use frequently spells failure. The use of any system, for oil well purposes, which requires a flow of water in the hole is also strongly objected to by practical oil men. For general use, therefore, the Canadian rig is recommended, though it was pointed out to our representative that, where expedient, the rotary system can be introduced and worked in conjunction with the Canadian rig.

There remains now very little more to be said. Both partners come to this country with feelings of complete confidence as to the future, and it is interesting here to note that they bring with them the good wishes of those associated with the oil industry in Canada and the States. Writing to them shortly after their arrival in this country, Mr. J. L. Englehart, the Chairman of the Imperial Oil Co., the Canadian branch of the Standard, said: "I am confident that with your well known energy, practical experience, knowledge and ability, you are sure to succeed in the efforts that you are putting forth in England in the building up of plant necessary for sinking deep wells, etc. Your large and practical experience will command success, and deservedly so. It appeals to me that the field that you have embarked upon is one so large and broad that it will permit of many contracts, while the knowledge, energy and experience which you possess may be at the command of a large clientele."

The only regret we have is that the establishment of such works in England did not take place years ago, for then it would have saved many of our English companies the needless spending of many thousands of pounds which are now irretrievably lost.

TEXAS OIL PRODUCTION AND THE SEISMIC DISTURBANCES.

A report from Galveston, Texas, published in the last issue of the *Well Drillers' News*, states that the recent sudden revival of many wells in the south-western Texas oil fields is attributed by experts to the earth's reaction from recent seismic disturbances. At the Saratoga field 20 wells, which have not produced for many months, are now flowing, and five are actually gushing, the total production being 10,000 barrels a day. The same conditions are reported at Humble and other fields where abandoned holes were numerous.

Following the Jamaica earthquake there was a sudden decline in the oil production and flowing wells ceased to produce oil. The oil lake in the Gulf grew to immense proportions and it was believed the Gulf coast oil fields were ruined. The wells that have suddenly revived are the deepest and range from 1,800 to 2,500 feet, while the shallow wells have decreased in production.

Hundreds of wells had been drilled to 2,500 feet in hopes of getting oil after the upper strata began to decline, but no oil was found. Now it spurts from these abandoned holes. The Gulf coast region, after the Jamaica earthquakes, dropped to about 15,000 barrels a day, is now producing 54,000 barrels and steadily increasing.

AMERICAN NOTES

Concessions to Oil Companies.—It is reported from Cleveland that the railroads have made a substantial concession to the independent oil men.

New Oil Refinery.—On April 23rd the Mayor of Alton drove the first spike in the new refinery which is to be built east of Alton by the Standard Oil Co. The refinery, when completed, will have cost over $3,000,000.

The Glenn Pool.—In spite of their being such active development in the Glenn pool, considerable tracts of proven territory are still untouched by the drill. At present, though there are 242 producing wells in the field, there is only one borehole to every thirty acres.

A Lucas Monument.—The Beaumont Chamber of Commerce has taken the initial step for the erection of a monument in commemoration of the bringing in of the Lucas well. A resolution has been adopted and is now awaiting confirmation by the various oil interests.

Another Pipe Line.—The Cudahy Oil Co. operating in the Bartlesville district of the Cherokee Nation has notified the Interior Department that it will soon apply for permission to lay a pipe line from Bartlesville to the plant of the National Refining Co. at Coffeyville, Kansas.

The Los Angeles Field.—The Los Angeles field, which is treated with in the most recent report of the U.S. Geological Survey, ranks as the fourth production in the State. Last year it yielded 3,000,000 barrels as against 1,700,000 barrels for 1905. An abstract of this report is upon other pages of this issue.

Mid-Continent Stocks.—On the first of last month there were stocks in the Mid-Continent fields of 24,000,000 barrels of oil, the whole of this being held by the Prairie Oil and Gas Co. Added to that figure an additional 3,000,000 barrels, and one has the approximate amount of oil in storage in the Mid-Continent fields.

Taxation of Oil Wells.—Illinois is to have its first experience with the taxation of oil wells. And this is how the assessment is to be made. The assessors have been instructed to value a dry well at $100; if the casing has not been removed, a well producing five barrels is to be valued at $125, a ten-barrel producer at $150, and so on.

The Anglo-Canadian Company.—The Anglo-Canadian Petroleum Co., Ltd., the concern which was formed in England some months ago, is, we understand, preparing to commence operations in the Canadian fields. The company has taken over the Moore Township territories belonging to Mr. John D. Noble and his son, and during the coming summer will carry on some active work.

Latest from Canada.—The Romney shallow sand district still forms the centre of Canadian attraction, the wells so far holding up exceptionally well. In the Tilbury deep sand districts new activities are noticeable and new wells are starting. Work in the deep districts has continued through the winter months, and many deep tests will be made in the near future from the present producing districts.

Oil Property Changes Hands.—The Ohio Oil Co. has recently closed a deal in St. Louis for the large and extensive oil holdings of Messrs. Everett and Busch, in the Lawrence county field. This is one of the leading properties in the Illinois field, and consists of leases upon 3,000 acres with 36 completed wells and 14 now drilling. The production of the wells at present is 4,000 barrels daily. The storage tanks on the property have a capacity for 50,000 barrels.

The Illinois Field.—The Johnson township pool in Clarke county is becoming one of the active districts in the Illinois field, and many good wells are the result of recent drilling. The shallowness of the territory is one of the great inducements, as it only takes a short time for the completion of a well. The Johnson township pool is gradually broadening out, and now practically connects with the new field opened up in Licking township, Crawford county to the south, and with the Casey township pool to the north.

THE OIL FIELDS OF CALIFORNIA.

Description of the Los Angeles District.

(Continued from page 235.)

The entrance of the Salt Lake Oil Co. into the Rancho la Brea region in 1901 marked the beginning of the development of the field now bearing that company's name. For years the oil seepages and brea on this ranch had been known, and large quantities of brea had been hauled away for paving purposes. At least one prospect well had been put down near the brea deposit, but no important results were obtained from any of these operations. The first well drilled by the Salt Lake Co. was abandoned on account of the caving in of the casing, caused by gas pressure. This fact being construed as a good indication, several other wells were sunk in the same locality until finally a "gusher" was struck and the value of the field assured. Since the beginning of 1902 the development in this territory has been rapid, and now it stands first in importance among the oil fields south of Santa Barbara county.

The eastern field comprises that portion of the productive oil territory of Los Angeles which lies between the Sisters' Hospital grounds, corner of Sunset Boulevard and Beaudry Avenue on the west, and the Catholic cemetery, corner of Cottage Home and Buena Vista Streets on the east. Its northern boundary is a line running from the northern part of the hospital grounds eastward to a point on the western line of the cemetery 600 feet north of Buena Vista Street; its southern limits are Alpine Street from the hospital south-eastward to Figueroa Street, and thence a line slightly north of east to the south-west corner of the cemetery. This area is nearly three-fourths of a mile long, with a maximum width of about 1,000 feet near the middle and a minimum of less than 400 feet at the ends; it contains approximately one-eighth of a square mile.

The first well drilled in the eastern field was sunk at the corner of Adobe and College Streets in November, 1896. From the time this well was found to be successful until the latter part of 1897 development went on rapidly until nearly the whole of the productive territory was exploited. Since 1897 few wells have been put down, while a number of those which at one time produced considerable quantities of oil have become exhausted and have been abandoned. There are at present 270 wells in the field, of which 211 are pumping and 59 are either not pumping or are abandoned. The wells vary in depth from 500 to more than 1,200 feet and yield from one to 12 barrels of oil per day. Some of the wells are said to have yielded as high as 50 or 60 barrels at their inception, but these were unusual. In addition to oil the wells produce more or less gas. The oil is black and varies in gravity from 16° to 19° B., the lighter oil coming, it is said, from the higher sand.

The central field occupies the territory lying between the Sisters' Hospital, corner of Sunset Boulevard and Beaudry Avenue, on the east, and Coronado Street, one-fourth mile north of Westlake Park, on the West. Its northern boundary is an almost straight east-west line drawn from the middle of the west side of the hospital grounds to a point on Coronado Street about 100 yards north of Ocean View Avenue; its southern boundary is Ocean View Avenue from Coronado Street east to Arnold Street, thence a line east to the corner of First and Lucas Streets, thence a line to the corner of Temple Street, and Beaudry Avenue, and finally Beaudry Avenue from Temple Street to Sunset Boulevard. The productive territory is about one and a-half miles long, 1,000 feet wide near its east end, and 300 feet near its west end. The total area is approximately nine-twentieths of a square mile. Like the eastern field, the central is a narrow band through one of the thickly populated residence districts of the city, the wells in many cases being put down in close proximity to houses and store buildings.

The central is the oldest field in the Los Angeles district, its first productive well having been sunk in 1892. As soon as oil was assured other wells were drilled in the immediate vicinity, and the field grew rapidly. The development of that part of the field lying east of First Street was practically complete by the end of 1896, while most of the wells in the western part were sunk during the period from 1897 to 1900. There are at present 516 wells in the central field, of which 205, or about 40 per cent., are pumping, while 310, or about 60 per cent., are either abandoned or not pumping. In the region west of Bonnie Brae Street the proportion of pumping wells is 60 per cent., but in the eastern part of the field it is only 31 per cent. This is doubtless due to the greater age of the eastern wells. The wells vary in depth from 500 to 1,400 feet, averaging deeper in the western than in the eastern part. The eastern wells now produce from two to eight barrels per day, and the western wells go considerably higher. The average for the field is said to be about four barrels. At their inception some of the wells in the western part of the field gave 60 barrels per day, but soon fell off to 20 barrels. The gravity of the oil in this field varies from 14° to 16° B.

The western field includes all of the oil-producing territory lying to the west and north-west of Coronado Street, north of Westlake Park, with the exception of the area described hereafter as the Salt Lake field. In its restricted sense the western field is a belt trending N. 70° W., about one-half mile wide at its south-east end and one-fourth mile wide at its western terminus south-east of Colegrove. Within this area of about 1¼ square miles are four rather distinct groups of wells, the area covered by them being something less than one-half the total area of the oil-yielding belt. These groups are embraced in what may be styled the Baptist College area, the Western Avenue and Temple Road area, the area north-west of Temple Road and Western Avenue, and the area south of Colegrove.

The region of the western field, viewed topographically, is one of transition from the pronounced hilly country north-west of Elysian Park to the broad, gently southward dipping Los Angeles-Santa Monica plain. Its characteristic features are low rolling hills, separated by more or less strongly pronounced ravines, which run in a southerly or south-westerly direction.

Superficial Pleistocene deposits cover a large part of the western field, but from the examination of exposures along the ravines in its eastern part and from a study of the well logs it is known that the formations underlying it are the same as those exposed in the eastern and central fields. These are the lower Puente sandstones, the Puente shale and thin-bedded sandstone, the Fernando sandstone and the Pleistocene gravel, sand and clay.

The Salt Lake field so named from its first important producing company - occupies an area approximately a mile square near the intersection of Fourth Street and La Brea Road, seven miles west of the business portion of Los Angeles. The productive territory as now developed embraces the north-western part of the S.E. ¼, the north-eastern part of the S.W. ¼ and the southern part of the N. ½ sec. 21, E. 1 S., R. 14 W. In addition to this there are some important wells in the central part of the E. ½ sec. 20 and some small producers in the N.W. ¼ sec. 28. The field occupies a part of the Los Angeles-Santa Monica plain, which extends southward with a gradually lessening slope from the base of Santa Monica mountains toward the hills south-west of Los Angeles.

There are at present between 75 and 80 productive or drilling wells in the Salt Lake field, belonging to the following companies: —Salt Lake Oil Co. about 50 or 55; Arcturus Oil Co., 9; Utah Oil Co., 1 (these three companies controlled by the Associated Oil Co.); A. F. Gilmore, 4; Pacific Light and Power Co., 4; E. P. Clark Oil Co., 7. In addition to the wells mentioned above, there are several comparatively small producers belonging to the last-named company. These are located near the northern half of the line separating secs. 28 and 29, and are pumped intermittently. The wells north of Salt Lake flexure vary from 1,200 feet to over 3,100 feet in depth, the deeper wells being as a rule the more productive and yielding the lighter oil. The individual wells produce from 20 to over 1,000 barrels a day, the average being about 100 barrels. Owing to the tremendous gas pressure nearly all the wells "gush" when they first come in, and it is said that one of the deep wells produced about 18,000 barrels a day for a short time after its inception. The gravity of the oil varies from 11° to 22°, the heaviest oil coming, it is said, from an isolated sand below the main productive zone. The average for the field is between 16° and 18°.

[The author then proceeds to speak of his conclusions concerning the future development of the field and also dwells upon the storage facilities – matters we shall refer to in our next issue.—Ed. *P.R.*]

AMERICAN PETROLEUM EXPORTS.

STATISTICS FOR MARCH.

According to the official publication of the Washington Bureau of Statistics, the exports of petroleum from America from the various ports during March were as under:—

	1906. Quantities. Gallons.		1907. Quantities. Gallons.
Crude—			
Baltimore	—	.. ..	—
Boston and Charlestown	—	.. ..	—
Delaware	9,107,927	.. ..	4,040
New York	1,351	.. ..	4,894,670
Philadelphia	—	.. ..	—
Galveston and Sabine ..	1,806,978	.. ..	759,667
Total	10,916,256	Total ..	5,658,377
Total value for the month, 1906..		.. ..	$611,111
,, ,, ,, 1907..		.. ..	$326,345
Naphthas—			
Baltimore	—	.. ..	—
Boston and Charlestown	—	.. ..	—
Delaware	—	.. ..	—
New York	2,825,379	.. ..	573,764
Philadelphia	2,036,608	.. ..	1,575,157
Galveston	—	.. ..	—
Total	4,861,987	Total ..	2,148,921
Total value for the month, 1906 ..		.. ..	$344,156
,, ,, ,, 1907 ..		.. ..	$231,004
Illuminating—			
Baltimore	298	.. ..	—
Boston and Charlestown	9,763	.. ..	79,876
Delaware	—	.. ..	—
New York	46,031,880	.. ..	37,626,104
Philadelphia	26,198,264	.. ..	25,057,726
Galveston	3,956,455	.. ..	30,360
Total	76,196,392	Total ..	62,794,364
Total value for the month, 1906		.. ..	$5,037,818
,, ,, ,, 1907		.. ..	$4,272,367
Lubricating—			
Baltimore	268,100	.. ..	503,720
Boston and Charlestown	4,449	.. ..	11,370
Delaware	—	.. ..	—
New York	9,493,682	.. ..	8,011,444
Philadelphia	4,476,296	.. ..	3,871,341
Galveston	9,380	.. ..	10,800
Total	14,251,907	Total ..	12,408,675
Total value for the month, 1906		.. ..	$1,678,175
,, ,, ,, 1907		.. ..	$1,522,155
Residuum—			
Baltimore	—	.. ..	—
Boston and Charlestown	—	.. ..	10,000
Delaware	—	.. ..	—
New York	3,755,500	.. ..	28,137
Philadelphia	4,388,995	.. ..	2,747,541
Galveston	—	.. ..	1,163,011
Total	8,144,495	Total ..	3,948,689
Total value for the month, 1906		.. ..	$246,735
,, ,, ,, 1907		.. ..	$124,805
Total Mineral Oils—			
Baltimore	268,100	.. ..	504,018
Boston and Charlestown	14,242	.. ..	101,246
Delaware	9,107,927	.. ..	—
New York	62,107,792	.. ..	46,243,489
Philadelphia	37,100,163	.. ..	38,146,435
Galveston	5,772,813	.. ..	13,580
Total	114,371,037	Total ..	86,959,026
Total value for the month, 1906		.. ..	$7,917,995
,, ,, ,, 1907		.. ..	$6,476,676

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PETROLEUM IMPORTS INTO YOKOHAMA.

The imports of petroleum products into Yokohama during February of this year amounted to 673,819 gallons, and were valued at 135,178 yen, as against 277,500 gallons for the corresponding period of last year valued at 58,275 yen. The petroleum imports for the two months of this year reached 1,754,765 gallons, and were valued at 329,748 yen.

The American Oil Market.

New York, Week ended April 27th.

There has been a heavy decline in the production, and operators in the central fields made heavy losses. The decrease in the production of crude oil is confined to the petroleum fields east of the Mississippi, Illinois, West Virginia, Ohio and Indiana. The decline is attributed to the past bad weather, and the lack of promising territory. Prices for all crude oil shewed firmness, and Ragland grade at the well was advanced 8c. to 70c. per barrel. The Congo field in Hancock county shews continued activity in new operations, and eclipses all districts in the older fields. The Illinois field has been active along the route of the new pipe line, says the *Oil, Paint and Drug Reporter*, and in the advent of continued good weather active operations are looked for. The few districts in the older fields, which have been presenting good producers since the opening of the year are gradually fading away, and fears are entertained that the end is rapidly approaching. The best results do not shew anything better than average producers, and dusters are on the increase. The Santa Barbara oil region in California gives promise of becoming one of the foremost productive oil fields in this country.

In the Mid-Continent field for the first two weeks in April the pipe line runs totalled over 107,000 barrels, and the shipments 71,000 barrels a day, which are unusually large figures. The runs from April 1st to 14th amounted to 1,506,858 and the deliveries 995,130 barrels, leaving 511,728 barrels to go into tankage. This shews an increase in the stocks of over a 1,000,000 barrels. Prospecting and leasing continued active. Reports from Texas note that the development of the Piedras Pintas oil fields are progressing. An end has come to wildcatting, which was active in the vicinity of Pine Island bayou in Hardin county. In the Henrietta oil field there is a considerable stir and oil leases are running high. In the Batson oil field work is being hampered by strikes by workmen. The following prices are for Texas and Louisiana crude oils, as credit balances posted by pipe lines and are according to gravity:—Spindle Top, 85c.; Sour Lake, 82c. at 85c.; Batson, 80c. at 83c.; Saratoga, 78c. at 83c.; Humble, 80c. at 85c.; Jennings, 75c.; Shreveport, 75c.; Dayton, 75c.

REFINED AND PRODUCTS.—The local market was firm on strong reports from the producing districts. The export demand for refined was good. There continued a steady demand from the home trade. The demand for refined for export was active, and sales in the local market amounted to a good volume.

The price for barrelled oil for export remained firm, and the market is quoted at 8·20c. for New York loading, and 8·15c. for Philadelphia loading. The total engagements during the week in the local market amounted to over 210,000 barrels. The principal foreign markets closed firm. Freight rates remained firm at 2s. 1½d. @ 2s. 3d. hence to London, and 2s. 3d. @ 2s. 7½d. to Continental ports, as to port and vessel.

Cases for export were fair in demand, and sales of over 341,000 cases were reported. The price of plain tops closed unchanged at 10·65c. Freight rates were firm and unchanged.

Crude for export closed firm, but no sales were reported. Pennsylvania crude closed firm at 8·20c. in barrels.

Naphthas remained firm, and sales of 147 barrels for export were reported.

Residuum was firm, with sales of 8,000 barrels for export, at 6 at 6½c.

CLOSING QUOTATIONS.

CRUDE.	Week ended April 20. 1907.	Week ended April 27. 1907.
Pennsylvania crude in bbls.	$8·20	$8·20
Pennsylvania crude in bulk	4·75	4·75
Residuum, bbls. for export	6@6½	6@6½

CRUDE AT THE WELLS.

The quotations for oil represented by credit balances were;—

	Week ended April 27. 1906.	Week ended Ap.il 27. 1907.
Tiona	1·74	1·78
Pennsylvania	1·64	1·78
North Lima	0·98	0·94
South Lima	0·93	0·89
Indiana	0·93	0·89
CANADIAN OIL:		
Petrolia	1·37	1·34

REFINED—FOR EXPORT.

		Week ended April 27. S.W.	Week ended April 27. W.W.
Barrels, cargo	per gal.	$8·20	@ 10·20
Philadelphia	.. ..	8·15	@ 10·15
Bulk, New York ..	.. ..	4·75	@ 6·75
Bulk, Philadelphia ..	.. ..	4·70	@ 6·70
Cases, New York ..	.. ..	10·65	@ 13·65
Cases, Philadelphia ..	.. ..	10·60	@ 13·60

REFINED IN CASES—110 FIRE TEST.

	Week ended April 20. 1907.	Week ended April 27. 1907.
3,000 to 10,000..	10·80	10·80
1,000 to 3,000..	10·85	10·85

REFINED—JOBBING LOTS.

In barrels, pkgs. included.

		Week ended April 20.	Week ended April 27.
120 fire test, S.W. ..	in barrels	12	12
130 fire test, S.W. ..	.. ..	12½	12½
150 fire test, W.W. ..	.. ..	13½	13½
In bulk from tanks	.. ..	10	10
300 fire test	.. ..	13¼@14	13¼@14

NAPHTHA AND GASOLENE.

	Week ended April 20.	Week ended April 27.
Naphtha, crude, car. lots, 68 @ 72 deg.	—	—
Gasolene, 86 deg...	24·00	24·00

PENNSYLVANIAN OIL RUNS from April 19th to April 25th were:—April 19th, 172,815; April 20th and 21st, 290,802; April 22nd, 115,103; April 23rd, 96,424; April 24th, 193,253; April 25th, 280,525. For the month of March, 2,911,685.

THE DELIVERIES OF PENNSYLVANIA OIL for the same dates were:—141,985; 354,995; 209,049; 147,803; 167,721; 148,867. For the month of Mar., 4,980,733.

CHARTERS FOR THE WEEK.

The total charters for refined, crude, naphtha, etc., in bulk, barrels and cases, during the week ended April 26th and from Jan. 1st, were as follows:—

	Week.	Year.	1906.
Refined, barrels and bulk	402,760	4,712,020	3,674,700
Refined, cases	340,000	5,450,010	5,471,000
Crude, barrels and bulk..	65,680	309,070	545,300
Crude, cases	—	—	187,000
Naphtha, barrels	1,180	17,110	160,000
Residuum, barrels ..	11,000	155,350	288,600
Lubricating, barrels ..	—	—	112,200
Total, barrels cde. eq. ..	355,782	9,170,580	8,252,171

CLEARANCES FOR THE WEEK.

During the week ended April 26th, and since Jan. 1 the clearances of petroleum, in gallons, from the port of New York, were as follows:—

	Week.	Year.	1906.
Refined	13,174,860	154,712,940	160,749,200
Crude	252,500	1,039,925	226,450
Naphtha	94,650	2,368,920	7,342,717
Residuum ..	150,000	306,087	—

EXPORT STATISTICS.

The total exports from the port of New York and from the United States have been:—

	Gallons.
From New York, week ended April 26 ..	17,566,480
Total from New York, from Jan. 1st, 1907 ..	212,791,107
Same period last year	214,505,379
Decrease	1,784,272
From United States, week ended April 26th..	34,077,067
Total from United States, since Jan. 1, 1907	361,024,684
Same period last year	384,152,123
Decrease	23,127,439

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The "Review" Shipping List.

May 10, 1907.

(*The following abbreviations are used in this table*:—L. Left; P. Passed; Arr. Arrived; Sp. Spoken; Tr. Trading.)

Vessel.	From.	For.	Latest Date and Position.
ALICE ISABELLE	Philadelphia	Sables d'Olonne	Arr. April 18
ALCHYMIST	Manchester	Lisbon	P. Eastham, May 8
ALEMBIC	—	—	At N. Sydney, April 30
AMERICAN	New York	Antwerp	L. April 29
APPALACHEE	Hankow	San Francisco	P Shanghai, April 22
APSCHERON	St. Louis (Rhone)	Batoum	Arr. May 7
ARAL	Philadelphia	Dover	P. Lizard, May 5
ARAS	Tyne	New York	P. Dunnet Head, April 27
ARGYLL	—	—	Coasting U.S. (Pacific)
ASHTABULA	Sourabaya	San Francisco	Arr. April 13
ASTRAKHAN	Philadelphia	Dover	P. Del. Break., April 24
ATLAS	—	—	Coasting U.S. (Pacific)
AUGUSTA	Cardiff	Havana	In Mumbles I. Rds., April 12
AUGUST KORFF	Manchester	Philadelphia	Arr. May 5
AUREOLE	Oporto	Barry	Arr. May 8
AZOV	—	—	Trading on W.C. of South Amca.
BAKU STANDARD	Kustendje	Havre	L. Rouen, May 6
BALAKANI	London	Kustendje	P. Peniche, April 30
BATOUM	Tyne	—	At Singapore, about April 22
BAYONNE	Kustendje	Italy	Off Cape d'Armi, May 8
BEACON LIGHT	Penarth	Novorossisk	L. May 8
BEME	Rangoon	Bombay & Kurrachee	L. April 4
BLOOMFIELD	New York	Avonmouth	Arr. May 5
BORJOM	Batoum	Alexandria	Arr. April 27
BRILLIANT	Tyne	Philadelphia	L April 30
BROADMAYNE	Manchester	Port Arthur (Texas)	P. Eastham, April 26
BULLMOUTH	Shanghai	Balekpappan	Arr. May 5
BULYSSES	Nordenhamn	Cardiff	Arr. May 2
BURGERMEISTER PETERSEN	Philadelphia	Stockholm	L. Tyne, May 5
CALCUTTA	San Francisco	Shanghai	Arr. Mar. 25
CARDIUM	Cardiff	Singapore	P. Gibraltar, May 8
CATANIA	Port Harford	San Francisco	Arr. April 9
CAUCASIAN	New York	Belfast	L. April 24
CHARLOIS	Rotterdam	New York	L. Scilly, May 5
CHESAPEAKE	Calcutta	Singapore	Arr. April 28
CHESTER	Antwerp	New York	P. Beachy Head, May 4
CIRCASIAN PRINCE	—	—	Trading on W. C. of South Amca.
CLAM	Singapore	—	L. May 3
COWRIE	Port Natal	—	L. May 4
COL. E. L. DRAKE	Philadelphia	New York	Arr. April 10
CYMBELINE	Batoum	London	P. Constant'ple, May 3
CZAR NICOLAI II.	Batoum	Hamburg	Arr. May 6
DAGHESTAN	Port Arthur (Texas)	Genoa	P. Gibraltar, May 4 5
DELAWARE	Kustendje	India	P Perim, April 30
DEUTSCHLAND	New York	Rotterdam	Off the Wight, May 3
DIAMANT	Hamburg	New York	Arr. April 30
EDWARD DAWSON	Ibrail	Wales	P. Beachy Head, May 4
ELAX	Philadelphia	—	L. May 2
ELSIE MARIE	Amsterdam	New York	Arr. May 8
ENERGIE	Hamburg & Tyne	Philadelphia	P. Dunnet Head, April 30
ERIVAN	Hamburg	Batoum	P. Sagres, May 3
ETELKA	Philadelphia	Alicante	P. Del. Break, April 24
EUPLECTELA	London	Tyne	Arr. May 7
EXCELSIOR	New York	Hamburg	Arr. April 29
EZIO	—	—	Coasting Peru
FRANCE MARIE	Philadelphia	Marseilles	P. Del. Break, April 20
GEESTEMUNDE	New York	Stettin	L. April 28
GENESSE	New Orleans	Philadelphia	P. Port Eads, April 28
GEORGIAN PRINCE	Havana	New York	L. April 24
GOLDMOUTH	Balekpappan	—	L. May 5
GUT HEIL	New York	Bremerhaven	L. May 3
HAINAUT	Patras	Rotterdam	P. Malta, May 7
HELIOS	Nordennam	Philadelphia	Sp. Apr. 30, 46 N., 37 W.
HERMOINE	Batoum	Manchester	L. May 8
HOTHAM NEWTON	Middlesbro'	Batoum	L. May 8
HOUSATONIC	Tyne	Philadelphia	P. Dunnet Head. May 1
IMPERIAL	—	—	Tr. on Lakes btn, U.S. and Can.
JOANNIS COUTZIS	London	Batoum	L. April 27
J. B. AUG. KESSLER	Batoum	—	At Singapore, about May 6
JAMES BRAND	Philadelphia	Manchester	P. Reedy Island, April 29
JULES HENRY	Barcelona	Philadelphia	P. Gibraltar, May 2
KURA	New York	Tyne	L April 25
LA CAMPINE	Antwerp	Philadelphia	P. Scilly, April 27
LA FLANDRE	Ghent	Philadelphia	Off the Wight, April 20
LA HESBAYE	Batoum	Antwerp	Arr. April 24
LA MADELEINE	Philippeville	Bougie	Arr. May 2
LA VIGUESA	Seville	Philadelphia	L. Mar. 27
LACKAWANNA	Tyne	Kustendje	P. Tarifa, April 28
LANSING	Astoria	San Francisco	Arr. Mar. 14
LE COQ	Philadelphia	Blaye	P. Del. Break April 27
LOUTSCH	Batoum	Dunkirk	Arr. May 7
LUCERNA	Philadelphia	Bergen	L. April 29
LUCIFER	New York	Dublin and Belfast	Sunk April 16, 40° 18 N., 60 W.
LUCIGEN (Now Cuyalogo)	Liverpool	Philadelphia	P. O. Hd. Kinsale May 8
LUCILINE	Philadelphia	Bordeaux	L. April 26
LUMEN	Hull	Tyne	Arr. May 5
LUX	Philadelphia	Cette	P. Tarifa, May 4
MANHATTAN	Lisbon	New York	Arr. May 1
MANNHEIM	Tyne	Philadelphia	Arr. May 3
MARGARETHA	Nordenham	Kustendje	P. Constant'ple, April 30
MAVERICK	San Francisco	Astoria	L. April 24
METEOR	Batoum	Vladivostock	At Colombo, about May 8
MEXICAN PRINCE	Liverpool	Cienfuegos	L. May 3
MIRA	Kustendje	Antwerp	P. Gibraltar, May 8
MUREX	Shanghai	—	At Singapore, April 25
NARRAGANSETT	Tyne	New York	Arr. April 28
NERITE	—	—	Tr. in China Seas
NEW YORK	Southampton	New York	Arr. May 4
OCEAN	Syrian Coast	Manchester	At Liverpool, Mar. 30
OILFIELD	Kustendje	France	Off Cape d'Armi, May 8
ORANJE PRINCE	Tyne	Cuba	L. May 8
ORIFLAMME	Rouen	New York	Arr. May 5
OSCEOLA	New Orleans	Genoa	P. Ponta Ferraria May 8
OTTAWA	Newport Nws.	Havana	P. Cape Henry, April 25
OURAL	Antwerp	Batoum	Off Ushant, May 5
PALEMBANG	Calcutta	Aroe Bay	L. April 15
PAULA	Hamburg	Philadelphia	At New York, May 3

Vessel.	From.	For.	Latest Date and Position.
PECTAN	London and Emden	Galveston	P. Sand Key, May 8
PENNOIL	Tyne	Philadelphia	L. May 8
PERLAK	Penang	Brandon	L. April 9
PHOEBUS	New York	Hamburg	L. April 26
PINNA	Tyne	Antwerp	Arr. April 29
POTOMAC	London & Tyne	New York	P. Dunnet Head, May 2
PROMETHEUS	Rotterdam	New York	Arr. April 30
PRUDENTIA	Rouen	Tyne	Arr. April 18
QUEVILLY	Rouen	Philadelphia	L. May 7
RION	London	Manchester	Arr. May 7
ROCK LIGHT	New York	Sunderland	L. April 27
ROMANY	Shanghai	Palembang	L. Mar. 31
ROSSIJA	Oran	Rotterdam	Off the Wight, May 7
ROTTERDAM	Amsterdam	New York	P. Nantucket, May 8
RUSSIAN PRINCE	New York	Cienfuegos	L. April 19
SALAHADJI	—	—	Tr. Sts. Settlem'ts and Java Seas
SAN CRISTOBAL	Cienfuegos & Newport Nws	Liverpool	Arr. May 7
SAN IGORACIO DE LOYOLA	Vigo	Philadelphia	L. Mar. 22
SAXOLEINE	Philadelphia	Blaye	P. Del. Break, April 28
SEMINOLE	San Francisco	Hankow	L. April 18
SILVERLIP	Singapore	Channel	Ab'nd'nd B. of B. May 1—*see* Art.
SINGU	—	—	Tr. in East Indies
SNOWFLAKE	Cuba	London	L. April 19
SOPHIE	Kustendje	Italy	L. April 29
SPONDILUS	Singapore	—	P. Malta, May 4
STANDARD	Philadelphia	Swinemunde.	P. Del. Break., April 27
STROMBUS	Aroe Bay	Palembang	Arr. May 4
SURAM	Blyth	New York	P. Butt of Lewis, May 2
SUWANEE	London	Philadelphia	Arr. April 26
SVIET	Alexandria	Batoum	L. Constant'ple, April 30
TELENA	Batoum	—	L. Suez, May 5
TEREK	London	Batoum	P. Gibraltar, April 26
TIFLIS	Batoum	Antwerp	P. Constant'ple, April 26
TIOGA	New Orleans	Galveston	Arr. April 29
TONAWANDA	San Francisco	Honololu	L. April 22
TROCAS	Kobe	—	L. April 26
TURBO	Batoum and Ymuidu	Hamburg	Arr. April 30
TUSCARORA	San Francisco	Calcutta	Arr. about April 22
TWINGONE	Rangoon	Calcutta	L. April 25
VEDRA	Tyne	Malta	P. Tarifa, May 8
VILLE DE DIEPPE	—	—	In Port Havre, May 1
VOLUTE	Singapore	—	L. May 2
WASHINGTON	Bengkalis	Bordenhamn	L. April 30
WEEHAWKEN	New York	London	L. April 26
WILLKOMMEN	Philadelphia	Rotterdam	Arr. May 7
WINNEBAGO	Shanghai	San Francisco	Arr. May 3

Latest Market Intelligence.

LONDON OIL MARKET.

Supplied by Messrs. Benjamin & Gee, 31, St. Mary Axe, E.C.

May 10th, 1907.

The prices of refined petroleum remain unaltered as follows:—Russian and Roumanian, 6¼d.-6⅜d.; American, 6¾d.-6⅞d.; Water White, 7¾d.-7⅞d.

LUBRICATING OILS

Are unchanged, latest quotations being:—

American pale, £7 7s. 6d. to £11.
American dark cylinder, from £8 5s.
American filtered cylinder, from £11 2s. 6d.
Shellene, £5. No. 1 Russian, £10 7s. 6d.

TURPENTINE.

American Turpentine has been very firm, as much as 52s. 3d. having been paid for Spot, but at the moment of writing it is quoted for Spot, 51s. 9d.; June to December, 45s. 3d.; and for the first four months of next year, 46s. 3d.

LIVERPOOL OIL MARKET.

May 9th.

Refined oils are quiet, and sellers quote 6⅛d. for Russian, Galician or Roumanian; and 6⅝d. to 7⅝d. per gallon for American.

Petroleum Spirit continues at 1s. 0½d. to 1s. 3d. per gallon for American deodorised, according to quality on the spot.

LATEST AMERICAN PRICES.

New York, May 9th.

Refined, in cases, is steady at 10·65; Standard White, 8·20; Credit balances, 1·78c.

Philadelphia, May 9th.

Standard White is still quoted at 8·15.

RUSSIA.

Baku, May 4th.

The Baku oil market is firm. Light crude oil, spot, 27½ copecs per pood; residuals, in ships, delivery during navigation, 29; kerosene, 34 copecs.

BELGIUM.

Antwerp, May 3rd.

The petroleum market is unchanged. Price of Standard White, spot, 21¼ francs per 100 kilos.

FRANCE.

Paris, May 4th.

Illuminating oil is quoted in bulk, in whole tank waggons, 23 francs per hectolitre; spirit, 31·25 francs per hectolitre. Special white oil, 31 francs per hectolitre.

GERMANY.

Hamburg, May 3rd.

The kerosene market is firm. The price of American Standard White is 6·80 marks per 50 kilos, Russian, 6·55 marks.

ROUMANIA.

May 3rd.

	Francs.
Crude oil from different fields, including pipe line charges, per 100 kgs.	4·10-4·20
Refined oil, exclusive of taxes	10·00- —
Motor benzine, including taxes	16·00-18·00
Benzine, doubly refined	24·00-25·00
Residuals in tank waggons, at refinery	3·50-3·60
Paraffin	120·00-125·00
Lubricating Oils—	
Agricultural	30-32
Prime	35-37
Extra	40-42
Royal	45-46

In barrels free on rail including octro tax of 12 fcs. per 100 kilos

Prices for Export.

Refined oil in tank waggons, per 100 kgs.	8·50- —
Benzine, sp. gr. 0·710-0·715	23·00-24·00
" sp. gr. 0·720-0·725	20·00-21·00
" sp. gr. 0·730-0·740	14·00-15·00
" sp. gr. 0·745-0·755	9·00-10·00

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IMPORTS of PETROLEUM into UNITED KINGDOM

Specially prepared for this Journal by the Custom House.

FOR THE WEEK ENDED 29TH APRIL, 1907—

Date.	Port and Importers.	Description.	No. of Gals.	Port Whence.
April.	London—			
23	Lubricating & Fuel Oils, Ld. (Joannis Coutzis)	Lub.	565,500	Batoum
23	Fielder, Hickman and Co...	,,	2,800	New York
23	Scott's Wharf	,,	6,000	,,
24	Anglo-American Oil Co. ..	,,	63,400	,,
25	Fielder, Hickman and Co..	,,	2,400	,,
25	Mordaunt Bros.	Lamp	3,200	Hamburg
25	Page, Son and East.. ..	Lub.	280	Antwerp
26	British Petroleum Co. (Rion)	Lamp	806,490	Kustendje
27	T. H. Lee	Lub.Gr.	640	Hamburg
27	,, ...	,,	630	,,
27	Fielder, Hickman and Co..	Lub.	7,200	Philadel.
27	Mordaunt Bros.	,,	3,400	New York
27	Scott's Wharf	,,	4,600	,,
27	Baron, Harveys and Co. ..	Lub.Gr.	400	,,
29	G. W. Sheldon and Co. ..	L.Comp.	850	,,
29	Bowring Petroleum Co. .. (Beacon Light)	Lamp	997,740	Pt. Arthur
29	Wilkins, Campbell and Co..	Lub.Gr.	240	Antwerp
29	London and India Dock Co.	,,	120	Hamburg
	Liverpool—			
23	J. Light and Son	Lub.	2 000	New York
23	D. Currie and Co.	,,	600	Hamburg
24	Burnaby and Chantrell ..	L.Comp.	560	,,
25	Meade-King, Robinson & Co.	Lub.	30,000	,,
26	Burnaby and Chantrell ..	L.Comp.	2,020	New York
26	Worthington and Boler ..	Lub.	5,000	Philadel.
26	G. B. Taylor	,,	2,400	,,
26	W. B. Dick and Co. ..	,,	34,300	,,
26	Meade-King, Robinson & Co.	,,	39,080	,,
26	Liverpool Storage Co. ..	,,	24,000	,,
26	,, ..	M Colza	8,000	,,
27	Vacuum Oil Co.	Lub.	8,000	,,
27	Crew, Levick and Co. ..	,,	18,530	,,
27	,, ...	M.Colza	7,220	,,
27	Meade-King, Robinson & Co.	Resid.	14,000	Pt. Arthur
27	Vacuum Oil Co.	Lub.	12,240	New York
27	W. B. Dick and Co. ..	,,	8,090	,,
27	George B. Taylor	,,	47,600	,,
29	E. H. Kellogg and Co. ..	,,	2,000	,,
29	Valvoline Oil Co.	,,	4,510	,,
29	Meade-King, Robinson & Co.	,,	2,400	Baltimore
	Bristol—			
24	Pickford's, Ltd.	,,	790	Hamburg
25	H. R. James and Sons ..	,,	2,400	New York
28	W. Smith and Co.	,,	20,800	,,
28	W. G. Clarke	,,	600	Antwerp
	Grimsby—			
26	J. Sutcliffe and Sons ..	,,	210	,,
April	Hull—			
23	Wilsons and N.E. Railway Shipping Co.	Lub.	120	Antwerp
25	,, ,,	,,	800	Reval
25	,, ,,	,,	300	Hamburg
25	,, ,,	,,	160	Antwerp
26	,, ,,	,,	8,840	New York
26	W. Gilyott and Co... ..	,,	29,760	,,
27	Meade-King, Robinson & Co.	Naph.	20,000	Rotterdam
	Manchester—			
23	Worthington and Boler ..	Lub.	1,000	Philadel.
23	J. T. Fletcher and Co. ..	,,	240	Antwerp
23	Wilson, Son and Co. ..	,,	250	Rotterdam
26	D. Currie and Co.	,,	2,640	Hamburg
26	Geo. B. Taylor	,,	120	,,
26	,, ...	,,	29,000	Philadel.
26	Manchester Liners	,,	770	,,
29	Crew, Levick and Co. ..	,,	24,180	,,
29	Meade-King, Robinson & Co.	,,	18,440	,,
29	,, ,,	M.Colza	2,400	,,
29	,, ,,	Lub.	4,040	Hamburg
11/4	Homelight Oil Co. .. .. (Cymbeline)	Lamp	594,000	Batoum
	Swansea—			
27	Burgess and Co.	L. Paste	360	Hamburg
	Aberdeen—			
27	Meade-King, Robinson & Co.	Naph.	30,000	Rotterdam
	Glasgow—			
25	J. P. Hutchison	Lub.	500	Rouen
25	Anchor Line	,,	81,100	New York
25	Clyde Steamship Co. ..	,,	320	Antwerp
	Leith—			
23	G. Gibson and Co.	,,	400	,,
25	Henderson and McIntosh ..	,,	46,280	Philadel.
25	J. Currie and Co.	,,	390	Hamburg
29	,, ...	,,	400	,,
	Lerwick—			
25	Alexandra Whale Fish. Co.	Lamp	200	Christiania
25	,, ..	Lub.	120	,,
	Total for Week		3,660,370	

* * *

FOR THE WEEK ENDED MAY 6TH, 1907—

Date.	Port and Importers.	Description.	No. of Galls.	Port Whence.
April.	London—			
30	Fielder, Hickman and Co...	Lub.	12,960	New York
30	London & India Docks Co..	,,	6,550	,,
30	Anglo-American Oil Co. ..	,,	79,360	,,
30	T. H. Lee	,,	300	Hamburg
30	London and India Docks Co.	,,	6,000	,,
30	A. Brown and Co.	,,	4,000	,,

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To Dealers only.

Date	Port and Importers.	Descrip-tion.	No. of Galls.	Port Whence.
May.				
1	Lub. and Fuel Oils, Ltd. ..	Lub.	50,430	Philadel.
1	E. J. Wilkinshaw	,,	4,000	,,
1	Consolidated Petroleum Co. (Euplectela)	Gas	1,298,460	,,
2	Mordaunt Bros.	Lamp	6,200	Hamburg
2	Anglo-American Oil Co. ..	Lub. Gr.	800	Antwerp
2	Page, Son and East.. ..	,,	440	,,
2	G. and H. Green	Lub.	3,330	New York
2	Beck and Pollitzer	,,	560	,,
3	J. Spurling	,,	240	,,
3	Anglo-American Oil Co. ..	M.Colza	12,000	Philadel.
3	,, ..	Lub.	40,400	,,
3	British Petroleum Co.	Lamp	40	Hamburg
4	London and India Dock Co.	Lub.	160	New York
6	Mordaunt Bros.	,,	4,100	,,
	Liverpool—			
1	Pickfords	,,	750	Hamburg
2	MacGowan Bros.	Lub. Gr.	480	,,
2	Valvoline Oil Co.	Lub.	8,000	New York
2	Cunard Steamship Co. ..	,,	1,130	,,
2	Meade-King, Robertson & Co.	,,	8,000	Philadel.
6	,, ,,	,,	3,760	Baltimore
6	,, ,,	,,	28,280	Philadel.
6	Bowring Petroleum Co. ..	,,	820	,,
6	Worthington and Boler ..	,,	3,200	,,
6	Crew, Levick and Co. ..	M.Colza	4,170	,,
6	,, ..	Lub.	22,050	,,
6	W. B. Dick and Co. ..	,,	15,240	,,
6	Vacuum Oil Co.	Lub Gr.	3,730	,,
6	,, ..	,,	3,730	New York
6	Geo. B. Taylor	Lub.	20,200	,,
6	Ismay, Imrie and Co. ..	Lub. Gr.	110	,,
6	E. H. Kellogg and Co. ..	Lub.	2,000	,,
6	Liverpool Warehousing Co..	,,	5,600	Reval
	Bristol—			
2	Ford and Canning	,,	2,500	New York
2	H. R. James and Sons ..	,,	29,200	,,
2	,, ...	M.Colza	1,000	,,
2	Pickford's	Lub.	420	Antwerp
2	,, ..	,,	460	Hamburg
3	,, ..	,,	1,250	,,
3	First Anglo-Russian Oil Co.	,,	430	,,
	Folkstone—			
2	S.E. and C. Railway ..	,,	240	Boulogne
April.	Hull—			
30	British Petroleum Co. (Aras)	Lamp	438,210	Kustendje
May.				
3	Hull & Barnsley Ry. S.S. Line	Lub.	1,020	Rotterdam
3	Wilsons and N.E. Railway Shipping Co.	,,	107,520	New York
3	,, ,,	,,	320	Hamburg
3	,, ,,	,,	1,640	Antwerp
3	,, ,,	,,	440	,,
4	,, ,,	,,	17,960	New York
4	Homelight Oil Co. (Lumen)	Lamp	900,400	Batoum
	Manchester—			
2	Bramwell, Fern and Co. ..	Lub.	3,340	New York
2	Geo. B. Taylor	,,	97,800	,,
2	Liverpool Storage Co. ..	,,	7,200	,,
2	W. Hodgson and Co. ..	,,	430	,,
2	J. T. Fletcher and Co. ..	,,	1,200	Antwerp
	Newcastle—			
2	Tyne-Tees Steamship Co. ..	,,	160	Hamburg
	Glasgow—			
2	Clyde Steamship Co. ..	,,	270	Antwerp
2	Anchor Line	,,	81,800	New York
2	J. and A. Allan	,,	49,500	Philadel.
2	,, ...	M.Colza	7,500	,,
	Grangemouth—			
2	W. Graham-Yooll and Co ..	Lamp	2,000	Hamburg
2	J. Currie and Co.	Lub.	3,400	,,
April.	Leith—			
30	J. Currie and Co.	,,	2,600	,,
30	Geo. Gibson and Co. ..	,,	680	Antwerp
May.	Lerwick—			
2	Norvona Whaling Co. ..	Lamp	120	Sandefjord
	Total for Week	..	3,422,590	
	Total for the Fortnight ..	..	7,082,960	
	Deduct to Correct ;—			
	Belfast—			
20/4	Anglo-American Oil Co. (Lucifer)	Lamp	709,560	New York
	Dublin—			
20/4	Anglo-American Oil Co. .. (Lucifer)	,,	466,360	,,
20/4	,, ,,	Petrolite	243,200	,,

◆

ENGLISH PATENTS.

(Specially contributed by Messrs. EDWARD EVANS & Co., Consulting Engineers, Chartered Patent Agents, and Enrolled Patent Attorneys, of the United States, of 27, Chancery Lane, London, W.C.)

Applications Filed in Great Britain.

Process for the Treatment of Benzines and Mineral Essential Oils and Products thereby.—Attiloo Fama, 8, Quality Court, Chancery Lane, London. Nc. 8486 of 1907.

Combustible Liquid applicable for Lighting and Heating Purposes, as well as for the Propulsion of Motors.—Anton Hugo Asplund, 77, Chancery Lane, London. No. 8178 of 1907.

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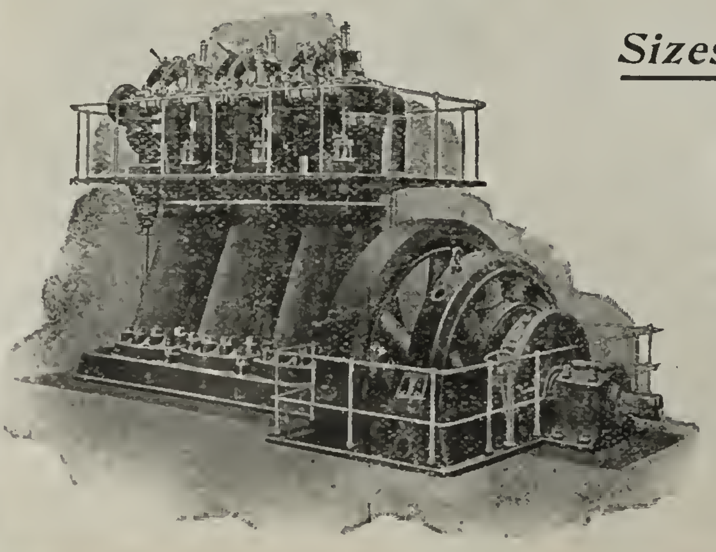

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The Petroleum Review.

By PAUL DVORKOVITZ.

Vol. XVI. *(New Series.)* May 25th, 1907. No. 399.

Editorial Notes.

The Report of the Russian Petroleum and Liquid Fuel Company.

The tenth report of the directors of the Russian Petroleum and Liquid Fuel Co. has been issued during the present week, and even among the marvellous documents which that board of directors has issued during recent years, the present garbled statement of half facts must have a special place. The report is certainly very vague in its detail, yet it furnishes sufficient evidence, if this still were needed, to convince every shareholder how utterly incapable is the present administration of bringing about a state of affairs when the declaration of dividends will be within the region of possibility. The loss for the past twelve months works out at over £78,000, so that, whatever may be argued as to future "prospects," it is as clear as daylight that unless a change of the most drastic order is introduced, and the reins given over to men of greater knowledge and experience in oil matters, the company's affairs will before long be in a state of total hopelessness.

The Why and Wherefore of it.

That there must be strong reason why the present directorate cannot manage the shareholders interests profitably is self-evident, even to the most casual observer. Where there is no competent person in control of an undertaking, it is the easiest thing in the world to turn what would otherwise be profit into a loss, and we are sure we are only mildly putting it when we say that the deplorable deficiency brought about during the past twelve months by the company is the inevitable result of its most recent blunders. When the shareholders were first apprised of the arrangements which were being made for the distribution of the company's products in Russia through the medium of the Nobel-Mazout combine, we particularly emphasised the indiscreet nature of such arrangements. To everyone, except the directorate of the company, it was apparent that such an agreement was the very worst thing the company could do, and now that the result of the working of the new scheme of distribution is made known, one wonders what the Hon. Evelyn Hubbard and his colleagues will have to say upon this subject, about which, twelve months ago, they could not say anything too rosy (or misleading). This distributing scheme is very largely responsible for the loss brought about in 1906, and we have reason to believe that the shareholders will now say that the time has come when they shall no longer be hoodwinked by the directors. They must insist upon experience and knowledge holding the upper hand of empty eloquence, and not rest contented until there is a return of the prosperous times which marked the company's operations at the commencement of its career.

A Simple Comparison.

For the purposes of making a simple comparison, we would commend our readers, and especially those who are shareholders in the Russian Petroleum and Liquid Fuel Co., to glance through the report of the Ter-Akopoff Petroleum Co. of Baku, which has just been published. This company, as our readers are no doubt aware, is one of the few producing concerns in Russia which does its own distributing business, for which purpose it owns extensive depôts in many parts of the interior. During last year this company produced 7,600,000 poods of oil, or almost 4,000,000 poods less than the Russian Petroleum Co., yet it received prices averaging at 25 copecs per pood, while the kerosene of the unfortunate Russian Petroleum Co. only brought 20 copecs. It can easily be seen, therefore, how it comes about that the Ter-Akopoff Co. now declares a dividend of over 7 per cent., while our English companies are retailing stories of the disorders to make up for their shortcomings.

The End of the Galician Cartel.

The negotiations for the renewal of the Austria-Hungarian refiners' cartel have all proved abortive, and so the cartel ceased to exist on the 1st of this month. The proposal to form a joint selling organisation on the same lines as the A. G. füer Oesterreichische-und Ungarische Mineraloel Producte, known by its trade name of "Olex," which is for the export trade only, has now definitely fallen through. The dissolution of the cartel has strengthened the position of the crude oil producers, as the refiners are now bidding against each other for crude oil in their anxiety to provide themselves with supplies. One of the most important questions now engaging the attention of the refiners is that of the continued existence of the "Olex" Co., the joint export organisation. The basis of this organisation is the agreement with the Petrolea Co., representing the crude oil producers, to sell the quantity of crude required for the manufacture of export products at reduced prices. Negotiations are now in progress between the leading refiners working for the export trade, and the producers, with a view to the continuance of this arrangement and these negotiations, will most likely come to an agreement on this point, so that the Galician petroleum export will not be materially affected by recent events in the refining industry.

April in the American Oil Fields.

As we go to press, the various details of the operations during April in the American fields reach us, and though it is impossible to do more than pay passing attention to them, we may mention that a heavy increase in field activity is the principal characteristic of the report. The activity in the Illinois and Indian territory fields has now reached high water mark, both sections revealing large gains in new wells and new production. The Pennsylvanian sections, too, saw increased energy in field work, but as time goes on, the scarcity of territory of the first class order is becoming more and more apparent. The new wells in the Pennsylvanian fields during the month had an average production considerably less than that of a month ago, the average being about ten barrels. In the Mid-Continental fields, the building of the new pipe lines to the Gulf have stimulated experimental work, and quite a number of new districts are being opened up.

BAKU PRODUCTION DURING APRIL.

The total production of crude oil at the Baku oil fields in April amounted to 37,868,000 poods, including 1,035,000 poods produced by spouters.

The output of the leading firms was as follows (in poods):—Nobel Bros., 5,000,000; Caspian and Black Sea Society, 3,000,000; Mantacheff, 2,200,000; Caspian Society, 2,000,000; Baku Naphtha Co., 1,900,000; Mirzoeff Bros., 1,400,000; Baku Russian Petroleum Co., 1,300,000; Russian Naphtha Co., 1,200,000; Aramazd Co., 1,200,000; Zoubaloff, 1,100,000; Moscow-Caucasian Co., 1,000,000; Neft Co., 1,000,000; Schibaieff Co., 900,000; Pitoeff & Co., 900,000; Naftalan Co., 800,000; Nagieff, 800,000; Russian Petroleum and Liquid Fuel Co., 600,000; European Petroleum Co., 500,000 poods.

THE TIN PLATE MARKET.

Messrs. Norton, Owen & Co., of 4, Bishopsgate Street Within, London, E.C., report under date 23rd May, 1907, as follows:—

As advised in our last report, the tin plate market is now in a very strong position. The demand continues active all round, and the exports for the four months ending April 30th last amounted to 137,208 tons, as against 123,151 tons for the same period in 1906. Tin is somewhat lower owing to speculative operations, but the reduction in price of this metal is more than counterbalanced by the advance of 5s. per ton on steel bars on the 16th inst., in consequence of which the combination of tin plate manufacturers on the 21st inst. advanced the minimum selling prices of tin plates 3d. per box all round, making to-day's prices as at foot, and a considerable amount of business has been put through at the increased prices.

IC	18¾ × 14	124 sheets	110 lbs.	15/7½ per box.
IC	19¼ × 14	120 ,,	110 ,,	15/7½ ,,
IC	20 × 10	225 ,,	156 ,,	21/9 ,,

F.o.b. Wales. Tin lining and iron hooping extra.

PRODUCTION OF ENGLISH COMPANIES IN RUSSIA.

Baku Russian Petroleum Co., Ltd.—The production for the week ended 11th May was 276,000 poods, or 4,449 tons; and for the week ended May 18th was 199,000 poods, or 3,208 tons. The reduction is due to a strike at the Bebe-Aibat works.

Russian Petroleum and Liquid Fuel Co., Ltd.—The production for the week ended 12th May was 161,000 poods, or 2,596 tons; and for the week ended 19th May was 149,000 poods, or 2,402 tons.

Spies Petroleum Co., Ltd.—The output for the week ended 12th May was 123,140 poods, or 1,986 tons; and for the week ended 19th May, 90,540 poods, or 1,621 tons. There was a strike on the oil fields of one day's duration.

The European Petroleum Co., Ltd.—The production for the week ended 12th May was 130,694 poods, or 2,107 tons; and for the week ended 19th May was 116,794 poods, or 1,883 tons.

THE STORAGE OF BARRELLED OIL IN LONDON.

A VISIT TO WINKLEY'S WHARF.

The rapid advance that has been made during recent years in the use of lubricating oils in this country has necessitated the bringing into being of not a few other branches of commerce, but none of greater importance than the storage of the various lubricants. It will, therefore, be of interest to our readers if we refer briefly to a visit which our representative paid the other day to one of the largest lubricating oil storage wharves in the country—we refer to Winkley's Wharf at Millwall.

The storage of barrelled lubricating oil, especially on a large scale, is naturally attended with far more difficulties than the storage of kerosene in bulk, for apart from the far larger space required to handle large quantities of the barrels, the task of unloading, storing, and removing necessitates considerably more labour, while the problem of leakage is one of those troublesome questions which demands more than a passing thought on the part of the firm desiring to become public storage agents. But difficulties were made only to be surmounted, and the bringing to bear of experience and careful judgment in the storage of barrelled oil of all descriptions, has resulted in Winkley's Wharf being second to none in the United Kingdom for the petroleum products for which it especially caters.

The business was established at Ferguson's Wharf, on the Thames, by the late Mr. Mark H. Winkley almost a quarter of a century ago, at which time, of course, the trade in lubricants was by no means so great as it is to-day. But as time went on, and the business grew even in greater proportion than the lubricating oil trade itself, it soon became apparent that other and considerably larger premises would have to be acquired, and so it came about that a few years later the extensive premises which now front the Thames at Millwall (the most convenient position on the river for an oil wharf) were obtained so that full advantage might be taken of the demand for public barrelled oil storage. From that time until the present, the history of Winkley's Wharf is one long link of extensions. More room was needed, and so additional buildings had to be acquired, while the facilities for handling the barrelled products had to be brought abreast of the times. What extensions have been made since the late Mr. Winkley founded the storage wharf at Millwall, we can easily gather to-day, not only from the 430 feet of river frontage which the wharf possesses, but from the up-to-date facilities which are everywhere in evidence to expedite the landing and delivery of goods, whether by water or road.

The exceptional facilities at Winkley's Wharf for the storage of barrelled oils may be judged from the fact that quite recently over 20,000 barrels of petroleum products were in storage, and there was ample room for more. Several large buildings are erected at various portions of the wharf, so that the barrelled oils may not be so readily subject to the summer heat, while in addition there is a perfect system of hydrants for watering the barrels, by which means leakage in the summer is reduced to a minimum.

Special sheds are reserved for such barrelled goods as turpentine and petrolatum, and in every part of the wharf the greatest precautions have been taken to prevent the possibility or spread of fire. In order to meet the demand for blended oil products the firm has erected a building in which oil blending can be carried out either cold or under heat, an apparatus having been specially installed for this purpose, while a special paint room renders the painting and marking of barrels for export or despatch into the provinces quite an easy matter.

We would congratulate the proprietors of the wharf upon the success achieved in the past, for it must be admitted that a list of clients which includes the names of such well-known firms as the Anglo-American Oil Co., the Vacuum Oil Co., and other influential distributors of petroleum products says much for the ability which has been instrumental in bringing such a state of things about.

THE RUSSIAN PETROLEUM AND LIQUID FUEL COMPANY, LIMITED.

DIRECTORS' AND GENERAL MANAGER'S REPORT.

The report of the directors of the Russian Petroleum and Liquid Fuel Co., Ltd., to be presented at the tenth ordinary annual general meeting to be held next Tuesday, states that the production of crude oil on the company's properties for the twelve months before deducting the the oil used as fuel was 11,307,549 poods, obtained from group XIX. Bebe-Aibat, 10,651,349 poods; and from plot 4 Bebe-Aibat, 719,200 poods, which compares with 13,845,789 poods for the corresponding twelve months of 1905, o.s.

As shewn by the accounts, there is a debit balance on the profit and loss account amountiug to £49,136 19s. 3d., after transferring the balance of general reserve fund of £28,796 4s. 3d. and before charging any sum for depreciation.

The directors regret that the results for the past year have proved adverse owing to the abnormal circumstances fully described in the general manager's report. During the strike in July and August last practically no crude oil was produced on the plots owned by this company. The deficiency had to be made up by purchases at current prices which have not been recouped by the prices ruling in the interior of Russia.

Unfortunately the unsettled state of labour in Baku still continues, and has a very prejudicial effect on the production.

The distribution of the products of the company in Russia has been carried on during the year under the agreement with Messrs. Nobel Bros. and Co., and the Mazout Co. Competition in the sale of kerosene has been very severe during the period under review, and it is anticipated that the sales will not realise the average market price at Baku. Provision is made for this in the accounts now submitted. The results from the sales of mazoot, however, promise to be more favourable.

The competition between the principal distributors of kerosene in the United Kingdom has not been quite so keen, consequently the prices realised have shewn an improvement.

Arrangements have been concluded whereby the distribution in Germany is placed on a sounder basis. The Deutsche Russische Naphta Import Gesellschaft, a distributing company in which this company holds a 12 per cent. interest, has amalgamated with another large distributing concern, the Deutsche Petroleum Actien Gesellschaft, under the title of the Deutsche Petroleum Verkaufs Gesellschaft. Competition has thereby to a great extent been eliminated. Further arrangements are being negotiated between the distributors in Germany, from which it is hoped that good results will be obtained.

Owing to the falling off in the production the refinery at Whitetown could not be used by the company. It has now been leased for three years to Messrs. Nobel Bros. and Co. at a fair rent.

Since the close of the financial year the balance (285,000 roubles) of the loan promised by the Russian Government has been received, making a total loan in all of 650,000 roubles.

Mr. Leslie Urquhart resigned the position of general manager to the company at the end of last year under circumstances already reported to the shareholders, and has been appointed local advisory director in St. Petersburg.

Mr. Charles Howden has been appointed to succeed Mr. Urquhart, and Mr. F. A. Heaton has been appointed assistant manager.

Mr. Charles Howden, the company's general manager in Baku, points out in his report that, unfortunately, the social unrest which has been prevailing in Russia for so long still shews no signs of abating even at the time of writing the present report.

Of the wells brought into exploitation during the year, Mr. Howden points out that No. 75 is giving every promise of being a good producing well—it is now giving about 3,000 to 3,500 poods per day from a depth of 264 sagenes, with 14-in. casing. Other wells pumping from about this depth are Nos. 26, 38, 40, 47 and 48.

If they were only able to continue steadily with their work, they had every hope of increasing their production by bringing into exploitation in 1907 several wells, viz., Nos. 32, 35, 51, 61, 62, 66, 71 and 73 on group XIX., and Nos. 3 and 4 on plot No. 4, all in the deeper strata.

During the year the five wells have been abandoned on account of damaged column and the impossibility of carrying them deeper in view of the small diameter of the casings.

The values of these wells have been written off in the accounts, with the exception of 100 roubles per well, left in for tracing purposes.

Despite the adverse circumstances, the manager is pleased to be able to report that we had a better boring record during 1906 than during the preceding year; the total depth bored is 1,314½ sagenes, compared with 950½ sagenes during 1905.

Respecting the general position at the wells, Mr. Howden says:—

The labour trouble, of course, is the burning question of the day, and, unfortunately, every year the relations between master and man become more strained. Formerly the troublesome element were the Russians and Armenians, but this last year the Mahomedans began to take an active part, and, being men of extremely frugal habits, able to live when necessary on very little, they proved to be very obstinate in their resistance, and were largely instrumental in prolonging the strike.

After the two months' stoppage, needless to say, we had a return of water difficulty. All this, coupled with the fact that even when at work the men, by a system of secret and open intimidation directed against the administration, were practically masters of the situation, has rendered our work extremely dangerous.

As our plot at Khirdalan, where we have been experimenting, has not given satisfactory results, we leased same for a term of two years to a local Tartar, at a rental 2,000 roubles per annum.

During the year under review we have been making deliveries to Nobel Bros. and the Mazout Co. under the combine contract for the sale of our products in Russia. Up to the time of writing, we have not been able to finally check the accounts for the sale of kerosene for the season ending 1st April, 1906, which were only presented by our partners in December, but these accounts shew that the prices realised in Russia to that date for kerosene shewed a certain improvement on the average prices ruling in Baku for this product during the period in question.

For the season 1st April, 1906, to 1st April, 1907, from information in our hands to date, the price realised for kerosene will probably be about 20 copecs per pood, which is lower than the Baku average prices.

As regards mazoot, we estimate we shall receive about 26 copecs on the amount delivered during last year.

As our commitments to the combine are considerably in excess of what we can now supply from our own production, we entered into negotiations with Messrs. Nobel and Mazout Companies and succeeded in obtaining their agreement on favourable terms to a reduction in quanties, which obviates the necessity of our buying in the market.

This is an operation upon which a very considerable loss was made during the year under review, the Baku market prices being higher than those realised in Russia. As a result of this new arrangement, our minimum commitments for 1907 have been reduced by about one-half.

THE TER-AKOPOFF PETROLEUM COMPANY.

The annual meeting of the Ter-Akopoff Petroleum Co. of Baku took place in St. Petersburg recently. The directors' report shewed that the past year had been more favourable for the company than any of its predecessors.

In 1906 the company produced 7,626,190 poods of crude oil. Sales and deliveries on contracts amounted to 6,037,824 poods, representing a sum of 1,520,541 roubles, or an average price of 25 copecs per pood. On the 1st January, 1906, there were in exploitation 11 boreholes. During the past year this number was increased by 24; out of the wells which were being drilled or repaired, on the other hand, 8 wells were struck off the productive list. Thus on the 1st January, 1907, there were in exploitation 27 wells. Drilling was started during the year on 15 wells, whilst preparations for drilling have been made for 4 wells. The amount of drilling done in 1906 was 7,651 feet, and the money spent on drilling work was 316,619 roubles.

The year concluded with a gross profit of 754,500 roubles, which is to be applied in the following manner:—Depreciation of property, 175,000 roubles; depreciation of boreholes, 225,562·04 roubles; reserve fund, 17,702·26 roubles; and Government tax, 21,236·31 roubles; out of which a 7 per cent. dividend will absorb 315,000 roubles.

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NEW COMPANIES.

Anglo-Mexican Oil Fields, Limited.

Registered by Gilbert Samuel and Co., 16, Great Winchester Street, E.C. Capital £250,000, in £1 shares. Objects:—To prospect for, open, work, explore, develop and maintain petroleum, oil, asphalte, bitumen, coal, metal and other mines, mineral and other rights, properties and works, and to carry on the business of oil, asphalte and bitumen producers and refiners, miners, shipowners, wharfingers, carriers, etc. Minimum cash subscription, 10 per cent. of the shares offered to the public. The first directors (to number not less than three nor more than seven) are to be appointed by the signatories. Qualification, £250. Remuneration, £200 each per annum (chairman, £100 extra), and 10 per cent. of the surplus profits, after 10 per cent. has been paid on the ordinary shares, divisible. (No sub-division of original capital is shewn).

Peruvian Petroleum Syndicate, Limited.

Registered by Rawle and Co., 1, Bedford Row, W.C., with capital £3,000, in £1 shares, to acquire and deal with lands on the west coast of South America, containing or supposed to contain petroleum and other oil, springs or deposits, and in particular land on the Lobitos and other oil fields in the province of Piura, Peru, and to adopt an agreement with Messrs. Williamson, Balfour and Co., and Messrs. Milne and Co. No initial public issue. The first directors are: A. Williamson, K. Mathieson, and E. Cooper.

THE PUMPHERSTON OIL COMPANY, LTD.

FIFTY PER CENT. DIVIDEND.

The report of the directors of the Pumpherston Oil Co., Ltd., for the year ended 30th April last, has been published. It shews that the net profit for the twelve months, after allowing for the maintenance of works and mines, depreciation and the amount expended on improved plant, amounted to £87,400, or an increase of no less than £26,400 on the result of the previous year. This improvement admits of the dividend on the ordinary shares being raised from 30 per cent. to 50 per cent. A sum of £20,000, or the same as a year ago, is placed to the reserve fund, bringing the total of that account up to £80,000, while in addition £5,000 is carried to a fire insurance fund. The company has evidently shared to a greater extent in the prosperity of the Scottish oil trade than those concerns which have previously issued their results for last year, and the shareholders will be pleased to note that the directors consider that the present satisfactory conditions will continue during the current year.

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THE TARBRAX OIL COMPANY, LIMITED.

The report of the Tarbrax Oil Co., Ltd., for the year ended 30th April last, to be submitted to the meeting at Glasgow on the 28th inst., states that, after providing for maintenance of the works and mines during the year, there is a balance at credit of profit and loss account of £10,873, from which falls to be deducted interest on loans, £1,115, leaving £9,758. The directors propose to write off preliminary expenses, £1,034, to pay a dividend at the rate of 6 per cent. per annum on the preference shares to 30th April, 1907, leaving a balance of £3,542 to be carried forward. Development in the mining department has been vigorously pushed during the year. The mine to the upper shale on Cobbinshaw estate referred to in last report has turned out well, and a good output is now being got at moderate cost. The output from this mine and the Cobbinshaw pit is now more than sufficient to supply the requirements of the works. To ensure an abundant supply of shale a new shaft has been sunk on Viewfield estate to work the same seam as is being worked in the Cobbinshaw mine, and a haulage road is being made from the new pit to the works. An output is now being got from this pit, and the haulage road to the retorts will be completed about the end of this month. A third bench of retorts has been erected at the works during the year, and it was expected that six months' working would have been got from this additional bench. In this, however, the directors have been disappointed, as, although some of the retorts were started in December, the whole bench was not fully at work till near the close of the financial year. The works are now in full operation, and the results being obtained are satisfactory.

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Batoum's Lost Trade.—Reports from Batoum shew that solar oil, which once formed an important item of the Russian petroleum export trade, has now almost entirely ceased to be exported.

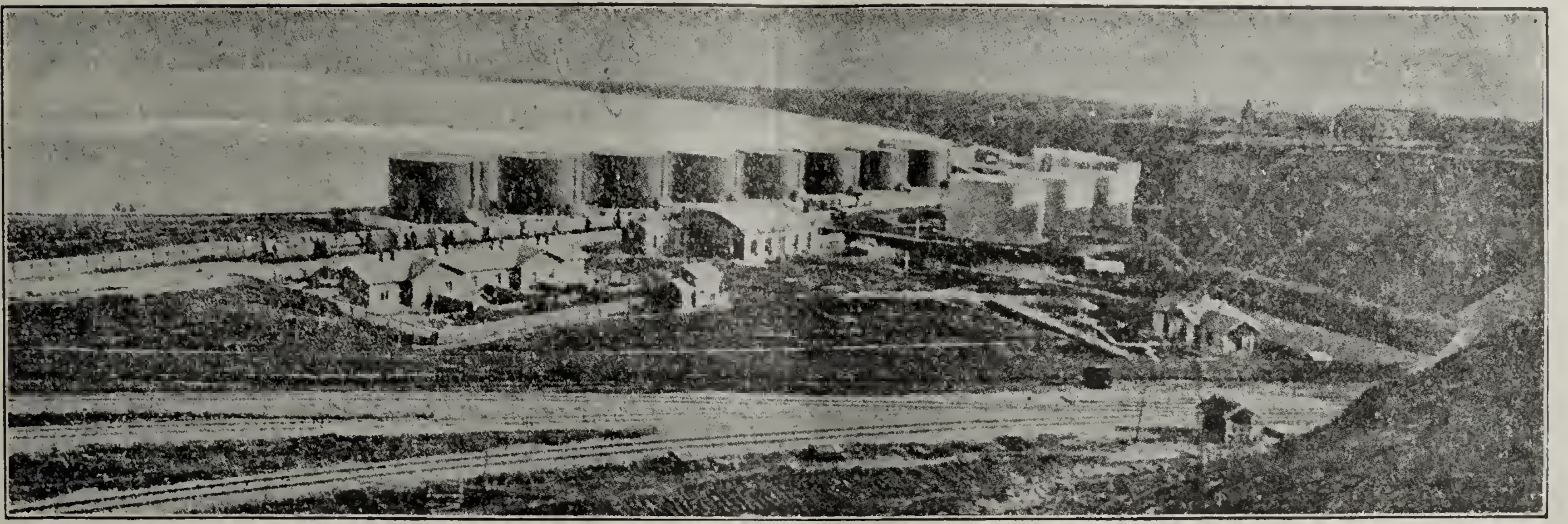
THE PETROLEUM EXPORT INSTALLATION OF CONSTANTZA.

The report of the Austro-Hungarian Consul at Constantza, for the year 1906, contains the following information relating to the extensions made during the past year in the petroleum export installations of that port.

The Roumanian Government, during the past year, have devoted considerable attention to the extension and improvement of the petroleum harbour of this port. Apart from sundry installations there were constructed, during the year, four jetties for loading vessels, and of these two have already been connected by pipe lines with the Government storage tanks, whilst the third will be connected with these tanks during the present year. For the fourth jetty no pipe line connection with the tanks is proposed, as it is intended to be used by steamers loading petroleum products in cases and barrels for the Eastern markets. With a view to the expected great development of this branch of the trade a large platform has been erected on which extensive warehouses will be built for storing petroleum products in cases, barrels and other packages intended for export.

The present sixteen tanks in the petroleum harbour having proved to be insufficient to satisfy the needs of trade, the construction was started last summer of four new tanks, of a capacity of 5,000 tons each. It has also been found necessary to increase the capacity of the pumping plant, both for unloading the oil arriving in tank waggons and for the loading of steamers. The plans for this purpose have been prepared and adopted by the Government, and the necessary funds provided.

Private enterprise has also been very active in Constantza during 1906 in extending existing installations and establishing new ones. Thus the Steaua Romana has enlarged its can and case factory, which is now capable of producing 6,000 cases daily, whilst the Aquila Franco-Romana Co. is now erecting a new case factory. Another case factory, under the firm of Tomis, has started working, merely manufacturing cases and selling them to the petroleum exporters.



In a recent issue of *Bursa* we find the following interesting information concerning the firms which rent or own storage tanks at Constantza. The Government tanks—sixteen in number—are rented by the following firms:—The Romano-American Co., 3 tanks; the Aurora Co., 2; the Aquila Franco-Romana, 2; and the Trajan Co., 2. The rent for a tank of a capacity of 5,000 tons is 8,000 francs per annum. The private storage installations include:—The Steaua Romana, 12 tanks; the Aquila Franco-Romana, 6 tanks; the Romano-American Co. are also preparing to build their own storage installation.

The private storage tanks are connected by pipe lines with the Government tanks. The oils are brought to Constantza from the refineries in the Prahova district by the railway, the trip taking from 18 to 20 hours.

DETAILS OF BAKU PRODUCTION AND BORING DURING FEBRUARY, 1906.

The following are the details of the production of crude oil at the Baku oil fields during February as published in the latest issue of the *Neftiannoie Dielo*: —

	Number of Wells in Exploitation.	Production (in poods). By Baling.	By Spouters.	Casual.	Total.	Average per Well per Day.
Balakhany	663	5,256,584	—	5,950	5,262,534	320
Saboontchi	597	12,368,055	—	312,309	12,680,364	848
Ramany	198	7,602,631	649,000	54,258	8,305,889	1,718
Bebe-Aibat	210	10,415,978	1,000,500	9,200	11,425,678	2,173
Total in February, 1907	1,668	35,642,248	1,649,500	381,717	37,674,465	909
Total in January, 1907	1,660	35,509,023	2,325,000	378,688	38,212,711	866
Total in February, 1906	1,178	30,664,043	54,500	418,986	31,137,529	1,020

In addition to the above, there were produced, in February, at Binagadi from 12 wells 20,737 poods of oil. The production by spouting was obtained from the following wells:—

			Poods.
At Ramany	Nobel Bros.	Well No. 400, on plot No. 140	649,000
,, Bibi-Aibat	Zoubaloff's	,, ,, 24, on XX group	1,000,500

RUSSIAN AND ROUMANIAN NOTES.

On Holy Island.—The Mines Office of the Caucacus has granted to Mr. A. Feigl an extension of the time limit for starting the production of petroleum, on plot No. 12, on Holy Island, till May 5th, 1909.

The Shipping Strike at Baku came definitely to an end on May 9th. The crews of all vessels returned to their ships. This has produced a very re-assuring effect on the Baku oil market. The strike has lasted altogether about a month and a half, during which time no oils were shipped to the interior.

"Once Bitten, Twice Shy."—On the 1st of March last, the agreement under which the whole output of benzine by the Akhverdoff Co., at Grosny, was sold to the Mazout Co., expired. The *Neftiannoie Dielo* announces that the Akhverdoft Co. has now commenced to export its benzine direct to the foreign markets.

Calculating Average Prices.—The special departmental committee which has been considering the question of introducing a more accurate basis for calculating the average price to be charged to producers for the Government royalty on the production on Government lands, has decided to leave the present basis unchanged.

Transfer of Refineries.—The refineries of the firms of Zeitlin and Itzkovitch, and Kagan and Zeitlin, at Baku, have gone over into the possession of Mr. L. Itzkovitch and H. Kagan. These refineries have now been thoroughly overhauled and joined into one large kerosene and lubricating oil refinery under the name of Itzkovitch and Kagan.

Increase of Capital.—On the 13th of this month an extraordinary general meeting of the Colombia Co. was held at Bucarest, at which it was resolved to increase the capital by 700,000 francs, a step which has become necessary in consequence of the leasing by the company of the Plopeni refinery belonging to the Société des Petroles Roumains.

Important Transfer.—It is reported that the owners of petroliferous lands in the Kertch district of the Crimea and on the Taman Peninsula on the opposite side of the straits of Kertch have transferred the same to the Internationale Bohrgesellschaft of Erkeleuz, the celebrated firm of boring engineers, at the head of which is Mr. Anton Raky, who has achieved such signal success in Roumania.

Unrest at Moreni.—The officer commanding the troops stationed in the locality of Moreni has reported to the general commanding the Prahova brigade that owing to the fresh agitation among the local peasantry an increase in the force under his command is absolutely necessary. In all the other petroliferous localities in the Prahova, Dambovitza, Bacau and Buzeu districts absolute calm prevails.

The Housing Problem at the Baku oil fields, which has been one of the main causes of discontent among the workmen, is at last nearing a solution. The Viceroy of the Caucasus has now given his permission to commence the preparation of the ground on the plot at Bebe-Aibat, which has been taken over from the Admiralty for the erection of a workmen's village. The Council of the Petroleum Association has also signed the agreement for a 30 years' lease of another plot, the communal property of the peasants of the village of Shikhovo. The area is 100 dessatines, and the rental 100 roubles per dessatine per annum. The Council also secured free of charge the use of a strip of land, 105 feet wide, from this plot to the Bebe-Aibat ambulance station, for a road, tramway, telephone line and other purposes.

Astrakhan Stocks.—The total stocks of oils at Astrakhan at the close of navigation in 1906 were 10,700,000 poods, including 10,000,000 poods residuals. Of this quantity about 1,000,000 poods were used locally during the winter, after the opening of navigation about 5,500,000 to 6,000,000 poods were shipped up the Volga, about 1,000,000 poods were delivered as fuel to steamers, leaving a balance of 1,500,000 to 2,000,000 poods. Since the opening of navigation there have arrived from Baku and Petrovsk 10 tank steamers with mazoot for the Eastern Transport Co., three for Nobel Bros., three for Lboff, one for Assadulaeff, in all 17 steamers and about 10 to 12 sailing vessels, which brought a total of 1,000,000 to 1,250,000 poods. Thus, at the end of April there was at Astrakhan a total stock of 2,500,000 to 3,000,000 poods of liquid fuel.

BATOUM PETROLEUM EXPORT TRADE DURING MARCH.

March proved a fairly successful month for the Batoum petroleum export trade. The shipments amounted to 5,056,000 poods, and the arrivals from Baku were 5,154,000 poods. The increase in the export operations was due chiefly to increased shipments of kerosene in bulk, which amounted to 3,751,000 poods. Towards the end of the month this activity in exports slackened somewhat. The whole of the kerosene delivered from Baku during the month was fully accounted for by shipments. The only product which did not go well was kerosene in cases, the shipments of which for the month did not exceed 434,000 poods. The exports of lubricating oils were also fairly active, having amounted to 866,000 poods of oils of various kinds including residuals and solar oil.

The following are figures shewing the turnover of petroleum products at Batoum during March:—

	Arrivals.	Shipments.	Stocks on April 1st.
Refined Kerosene ..	4,368,000	4,185,000	4,360,000
Kerosene Distillate ..	—	—	45,000
Solar Oil	42,000	43,000	323,000
Machine Oil	475,000	555,000	412,000
Spindle Oil	122,000	61,000	112,000
Cylinder Oil	50,000	17,000	39,000
Vaseline Oil	—	28,000	47,000
Lub. Oil Distillate ..	—	—	14,000
Residuals	95,000	152,000	325,000
Other Products	2,000	10,000	3,000
Total ..	5,154,000	5,051,000	5,680,000

Of the kerosene delivered from Baku during March, 708,000 poods came in tank waggons and the rest was pumped through the pipe line.

Owing to the comparatively small arrivals the stocks remain small. It is interesting to note that of the total stocks of 5,680,000 poods, 3,650,000 poods are held by the three leading firms.

Bulk oil exports have increased owing to increased shipments to English ports, which amounted to 1,346,000 poods. On the other hand there being no demand for distillate, shipments to France fell to 273,000 poods; to Germany there were shipped 483,000 poods, and to Belgium 616,000 poods. Bulk shipments to Alexandria, together with small consignments of case oil, made up a total for North African ports of 468,000 poods. A cargo of 327,000 poods was shipped by Nobel to Vladivostock. Shipments of bulk oil to Russian home ports, although in small quantities, made up the substantial total of 788,000 poods. To Turkey and the Balkan States there were exported 431,000 poods.

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BATOUM PETROLEUM SHIPMENTS.

The following were the shipments of petroleum products from Batoum during the week ended April 21st, 1907, o.s. (in poods):—

	Illuminating Oil.		Other Products.	
	1906.	1907.	1906.	1907.
To Europe ..	217,000	384,000	241,000	67,000
To the East ..	399,000	725,000	—	4,000
To Russian Ports.	1,000	—	1,000	—
From 1st Jan. to April 21st:—				
To Europe ..	3,517,000	4,963,000	1,938,000	3,010,000
To the East ..	1,267,000	3,559,000	1,000	95,000
To Russian Ports	1,360,000	1,505,000	91,000	36,000

The Oil Industry of Baku during 1906.

By VICE-CONSUL McDONELL.

After the severe set-back received in the year 1905 by every branch of trade and commerce in Baku, especially the oil industry, it could hardly be expected that matters would right themselves within a year, even had that year been one of uninterrupted work and quiet, which has not been entirely the case. It is, therefore, highly satisfactory at the time of writing to be able to report that, during the last few months at least, there has been a growing feeling of confidence, and although it cannot be said that either the oil industry or the various industries dependent on it have in any way recovered their former position, yet, in comparison with the complete dislocation of all trade caused by the events of 1905 and the general unrest of the first half of the present year, trade prospects are much brighter and business generally much brisker.

With special reference to the oil industry, which, being the one staple industry of Baku, influences all other branches of trade (machinery and material supplies generally) we may safely look forward to prosperous times in the future, if given another year of more or less uninterrupted work with the possibility of bringing the production of crude oil up to the normal figure.

Since January there has been no general strike, but strikes of certain groups of firms are now an almost monthly occurrence.

Owing to the shortage of production in crude oil during the last two years, 1905–6, the prices of crude oil and residuum are very high; the prices at the time of writing having risen to 26 copecs (about 6½d.) per pood (36 lbs.) of crude oil and 28½ copecs for residuum. Prices are likely to remain high during the ensuing year, even should the production increase very materially. Nearly all the spare crude has already been purchased on forward contracts, there being very little free crude left on the market; therefore, any increase in production will naturally go to make up the shortage and replenish the stocks, which this year will be very low at the opening of the spring navigation, and notwithstanding the prospects of a return to the normal production, the shortage and small stocks of the past two years will by no means be covered.

From published statistics it will be seen that even less kerosene left Baku in 1906 than in 1905 and less than half the quantity exported in 1904. This is accounted for by the fact that the high prices received for residuum make it more profitable to manufacture more of this product and proportionately less kerosene; also there has been very little demand for kerosene for export, the Baku producers finding it impossible to compete on the European markets, one obstacle being the high freights charged by the Government for railway transport between Baku and the sea ports, and another being of course the high prices for crude. With reference to the freights, the petroleum producers have repeatedly petitioned the Government to reduce these, contending that with cheaper freights they could again compete on European markets; from the latest advices it seems that this matter is now under serious consideration by the Ministry, and a decision may be expected at an early date. The smaller quantity kerosene sent into Russia this year is due to the abnormal state of the country and also to the heavy stocks which accumulated three years ago and which it was not possible to get rid of last year.

For lubricating oils it will be seen there has been a good demand; exports abroad were within 300,000 poods of quantities exported in 1904, while quantities into the interior were practically the same as in that year. A certain amount of this is stocks which could not be got away last year, added to which there has been a good demand from Europe, owing to big syndicates competing for the European markets, and many unfulfilled contracts standing over from last year.

The chief market for petroleum residuum for liquid fuel is in the interior of Russia; this year the requirements in Russia have been less, but, on the other hand, owing to the shortage of crude, the output has been smaller. The lesser demand is largely due to the abnormal state of the country, the prevalence of strikes and the closing of many factories, and also undoubtedly the competition of coal, especially in the north.

Should the general situation in Russia again become normal, the demand in the interior will doubtless increase considerably, but in spite of any material increase in the crude production, the shortage of stocks and deliveries for the last two years will still tend to keep prices very high for the next year.

From the point of view of British trade, machinery, materials, etc., should be the most interesting branch in Baku.

Before giving a list of the requirements, I would like to make a few remarks with reference to British traders.

In the first place, it should be understood that freights from the United Kingdom are cheaper—1 rouble 10 copecs (about 2s. 4d.) per pood being reckoned for machinery from the United Kingdom, as against 1 rouble 50 copecs from Germany, and again there is no doubt that British workmanship and material still hold their own.

Taking it for granted that British traders wish to see their goods on the Baku market, and judging from the correspondence received here it would seem so, there are several points on which our competitors are certainly showing more energy than ourselves. Whereas the British firm invariably requires cash on documents or a very short credit, our competitors are always willing to give as long a credit as possible and generally do their utmost to give the best possible terms. Again, when placing something new on the market, foreign firms will send their goods on consignment to their agents, often even paying the duty themselves; recognising that the agent runs a certain amount of risk when endeavouring to push a new line, they themselves are willing in their turn to take a certain amount of risk in the matter of payment. It must be remembered that the business methods here and in the United Kingdom are entirely different, and the credit system here plays an important part. As to the risks in the matter of credit, this can be easily minimised by responsible and trustworthy agents on the spot. One or two British firms, one especially, are doing very good business here by having their own men out here. It was a very noticeable fact that, after the wholesale destruction in August, 1905, the oil fields had hardly finished burning before the town was filled with German, Austro-Hungarian and Swedish travellers, each ready with some special conditions, but no British traveller appeared with the exception of those already on the spot.

Mr. McDonell then proceeds to call the special attention of English manufacturers to the opportunities which are open for them to do increased trade with the oil districts. In this respect he says the principal requirements for the Baku fields and industry are:—

Electrical appliances of all kinds. Apart from electric lighting plants, electricity is coming in very much on the oil fields for drilling and pumping. Its great advantage is its economy in space, the power being supplied from the central power station, and the erection of an extensive and cumbersome boiler plant is thus avoided where the land is required for drilling. It also has the advantage of cleanliness. All electrical plant is supplied from Germany.

Steam engines for driving drilling rigs, machinery and baling drums. These engines, usually of 14½ by 18 inches, of about 35 to 40 horse-power, are greatly used for driving all kinds of machinery. Every derrick not working with electricity, steam turbine or oil motor is supplied with one of these small engines while drilling, which is afterwards used for turning the baling drum. These engines have hitherto come entirely from the United Kingdom, British-made engines still holding their own, thanks to the workmanship and the energy of their representatives here.

Pumps of all kinds and dimensions were, until a short time ago, supplied exclusively from the United Kingdom, but now a greater number of foreign pumps are being sold. These pumps are much cheaper, and the conditions of payment in many cases easier. Pumps of the Cameron, Duplex and Riedel type are principally used.

Steam turbines have only lately come into use on the oil fields, and are now being used a great deal for driving electric dynamos, and for pumping installations. In one or two cases they have been tried with some success for driving the drilling rigs and baling drums in wells. Their chief advantage, besides a slight economy in steam, over the ordinary steam engine, is their compactness, and the comparative ease with which they can be moved from one well to another. Should these turbines eventually take the place of engines in the derrick, they will then be in great demand. They should be of small horse-power—say from 40 to 100 horse-power.

Oil motors for driving machinery are used very considerably in the outlying districts for driving the drilling machinery in prospecting wells, and for pumping installations. They are also used on the oil fields here, where adequate space for a boiler-house is not obtainable, or where the number of wells does not justify the erection of a boiler plant. These motors must be made to burn crude oil, as kerosene or benzine is too expensive. The motors used here at present are mostly of foreign manufacture. The Germans only have lately put a new one on the market. There is a small but increasing demand for motors for boats, steam tugs, etc., these also must be made to burn crude oil.

Air compressors for pumping oil wells are also being considerably used now; these compressors are are of the American type and supplied from America. Here, also, the Germans have lately placed one on the market.

Steel for high grade tools is almost entirely British. Sheet lead was at one time supplied solely by the United Kingdom, but lately, lead from Germany yielding 99·97 per cent. of pure lead on analysis, is being imported from Germany. Tin is imported only from the United Kingdom.

With reference to the market outside Baku; for the last two years the state of the surrounding country has been such as to more or less close this market; however, the situation seems to have improved considerably of late, and when it becomes more normal there should be a good sale for agricultural instruments and machinery of all kinds. These, it must be borne in mind, should be as little complicated as possible, as the labour is not very skilled, and in many places there may be no workshop or skilled mechanic within 100 miles.

The Society of Naphtha Producers and Refiners have, during the last year, greatly increased the number of schools and medical aid for workmen, and have decided to assign large sums for the erection of club-houses and libraries for the men. In fact, very energetic steps are being taken to better the condition of the working classes in all ways possible. So far no definite steps have been taken for the carrying out of the project for special colonies of workmen's dwellings, although grants of land have already been made by the Government.

The reclaiming of the bay on the shores of the Bebe-Aibat oil fields has not yet been commenced. Some months ago the Government offered prizes for the best scheme. There were a number of entries, but none of the schemes were able to fulfil the conditions. The filling in of this bay will be given out on contract; particulars of the work to be done may be obtained from the offices of the Society of Naphtha Producers and Refiners.

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Oil to be Replaced by Coal on Russian Railways.—It is announced that the Vladicaucasian Railway Co. has decided to replace the use of liquid fuel on the northern sections of their line by coal. The consumption of fuel by this railway in 1905 was: Coal, 4,110,892 poods of a value of 449,249 roubles; oil, 16,777,438 poods of a value of 3,186,134 roubles. Of the oil used a little over 3,000,000 poods came from Baku, and the rest from Grosny. The figures for 1906 are not yet available.

THE "SHELL" TRANSPORT AND TRADING COMPANY, LIMITED.

INCREASE OF CAPITAL UNANIMOUSLY AGREED TO.

An extraordinary meeting of the shareholders of the "Shell" Transport and Trading Co., Ltd., was held on Wednesday of last week at the Great Hall, Winchester House, E.C., for the purpose, as announced in the last issue of the REVIEW, of considering a resolution to increase the ordinary share capital of the company by the issue of 500,000 ordinary shares of £1 each.

The chairman of the company, Sir Marcus Samuel, Bart., presided, and he was supported by a full board of directors.

Mr. E. A. Smith Rewse, the company's secretary, read the notice convening the meeting, after which

Sir Marcus Samuel said:—

Gentlemen,—You will have gathered from our meeting to-day, that the complicated and difficult details of an amalgamation involving a capitalisation of no less than £10,500,000 have been successfully accomplished, with only one stage yet to cover, and that a formal one.

The boards and the shareholders of the "Shell" and the Royal Dutch Companies have ratified the agreements and definite documents have been exchanged, embodying the terms agreed upon, and all that now remains to be done is to get the formal consent of Her Majesty the Queen of the Netherlands to the statutes of the new Dutch company which will be formed, and as this was applied for on the 23rd of April, we may expect this at any moment.

When I last had the pleasure of addressing you, I informed you that the requirements of this company would amount to about £350,000, and it is because we find that the amount required will be nearer £600,000 (as I shall shortly explain to you) that we have deemed it desirable to raise the capital of the "Shell" Co. rather than to have a debt of this magnitude as a floating charge.

We had to provide in any event £200,000 in cash (the Royal Dutch Co. providing £300,000) for new working capital for the combine, but since the progress of these negotiations a very favourable opportunity occurred, enabling the Royal Dutch to purchase the Sumatra-Palembang Co. outright, and also to obtain a controlling interest in the Moesi Ilir Co.—both of these concerns being contributors of oil to the Asiatic Petroleum Co.

The Royal Dutch Co. paid in their own shares for the purchase of these concerns, practically giving to the shareholders of these two companies a participation in their profits. They were quite willing to accept payment from the "Shell" Co. by a proportionate number of "Shell" shares, but your directors thought it far better and more equitable to their shareholders to meet this new acquisition of property by a cash payment, and they have reason to congratulate you upon having satisfied the Royal Dutch by a sum of £200,000, which they have agreed to pay them.

Now a word as to the returns we are likely to receive for these payments. I repeat that, had we not have amalgamated with the Royal Dutch, we should have had to undertake the erection of a refinery for wax in Koetei for ourselves. The actual estimates for the work amount to £230,000.

As to what this is going to produce, I rather hesitate to predict, and yet I feel justified in telling you that, if our expectations are realised, we may hope for an additional net revenue from the working of this refinery of not less than £200,000 per annum, so that probably none of us will quarrel with this investment.

Although the purchase of the Sumatra-Palembang and the Moesi Ilir was actuated rather by policy than any expectation of a large return, I am glad to announce that, under the able management of the Royal Dutch, both these properties have undeniably increased in value since we jointly acquired them, and as their earnings will in future belong to the pool, a handsome return will accrue to the "Shell" Co., by way of the 40 per cent. which they will receive in the earnings of these companies, and will make an excellent return upon the capital invested in them, besides securing complete harmony among the producers.

It did not appear desirable to your directors to ask the shareholders to continue to forego dividends in order to provide this very large amount of new capital (for that it is capital expenditure and nothing else is undeniable), and seeing that the company has made over to the new combine the whole of its assets, and that it could not offer any security to creditors without prejudice to the engagements entered into with the preference shareholders, it is obviously sound finance to raise the necessary funds by increasing the capital, and this you are invited to do.

As to £285,000, the acknowledged outstanding liabilities to sundry creditors of the "Shell" Co., you are aware that under the agreements the new combine have to pay 5 per cent. interest upon this until it is extinguished by the appropriation of 50 per cent. of the "Shell" profits in excess of £150,000 per annum—but we were confronted with the same difficulty here, that we had no security to offer of any tangible character, since we are expressly precluded from selling or hypothecating any of our shares in the new company (the Royal Dutch, of course, being under a similar restriction). So far, therefore, as we can see, we shall need a sum of about £600,000 in order to entirely clear off our liabilities and leave our income free for the future.

Inasmuch as your directors have determined to offer the new shares to the existing registered shareholders *pari passu* with their holdings, it is somewhat immaterial upon what terms these are offered.

I am happy to state that your directors see their way clear to revert to the former practice of this company of paying an interim dividend on the 1st of July, and this will be duly announced, at the rate of 10 per cent. per annum, and will apply to the present share capital. It is only fair to say that we should have paid this interim dividend from our own earnings, even if the amalgamation had not have been accomplished.

We propose, then, offering 400,000 new shares at 30s. per share, to be issued only after the 1st July.

In order that those shareholders who need the facility may have ample time in which to pay for their shares, the directors propose that the terms of payment shall be:—10s. per share on allotment; 10s. per share in August; 10s. per share in September. Shareholders may pay in full upon allotment if they so desire, and upon paying up their shares in full they will be entitled to share certificates ranking *pari passu* with the present shares and participating in all future distribution of dividends.

To those shareholders who elect to pay by instalments, a charge for interest at the rate of 5 per cent. per annum will be made, but they too, will be entitled to pay in full whenever a call becomes due, and would then, equally with the other shareholders, receive their share certificates.

Our object in this is to enable such of our registered shareholders who desire to take up their proportion of shares, to do so, by giving them time to pay for them, and the means we have devised for doing this appear to us only equitable, seeing that it is to the interest of the company to allow shareholders, who so desire, to pay for their shares in full on allotment, whilst seeing the very favourable terms upon which they are being issued, we cannot allow any rebate for payment in full, and the only alternative is to charge interest to shareholders who desire to extend their payments.

The shares will not be underwritten, and an opportunity will be given to every registered shareholder, in proportion to his holdings, to take a further quantity of shares which the directors may have at their disposal, should any of the present shareholders decline to participate in the new issue, and we have ample assurance that these will be readily taken. It is perhaps necessary to mention that it is not the intention of the directors to issue the whole of the capital to be sanctioned at this meeting, and £100,000 will for the present, therefore, remain unissued.

Before formally moving the resolution authorising the increase of the capital of the company, there are a few features of very great interest which it is our duty to indicate to you.

I am happy to say that every product that we handle has materially increased in value during the last few months, and as our supplies of crude oil from the various fields have been amply maintained, we have had little difficulty in meeting the demands for our products, save only the one of sufficient transport. So rapidly do things move, that this feature in our business will come as a great surprise to those shareholders who have remained from the first in the "Shell" Co., for it was not twelve months ago that our surplus tonnage was rather a burden to us, yet to-day we should be very thankful indeed to have more ships.

The loss of the "Silverlip," to which I shall shortly refer, is a heavy blow to us.

The consumption of petrol has increased by leaps and bounds, not only in the United Kingdom, but throughout the world. The petrol sold under the brand "Shell" has rightly established a reputation second to none, and I can unhesitatingly assure our shareholders and the public that it is, in my opinion, the finest in the world, since it is absolutely pure spirit, with boiling points which render it an ideal motor driver.

As many of our shareholders are motorists, they will know for themselves that prices are on a more satisfactory level to the company than those which prevailed previously, but it is only the inexorable law of supply and demand which has enabled us to obtain prices which are fairly remunerative to us, and which we think are not really burdensome to the users of motor cars. In this connection, I can repeat the assurances that I have already given that, so far as we can see, there will be no difficulty in supplying any demand which is likely to be made upon us if we keep our fleet up to the requirements of the day, and this you may be quite sure we shall do,

In connection with our wax plant, we are erecting a lubricating oil plant, and we are already assured of a profitable offtake for this article, which will add materially to our income.

The benefits of the working agreement which we entered into the with the Burmah Oil Co. in India have been exemplified in the balance sheet which the directors of that company recently presented to their shareholders; and it will also be found reflected in the more satisfactory prices that we are obtaining for our oil in India. This has not been done without much sacrifice, but the attitude of the directors of the "Shell" Co. being—as will be that of the directors of the combine - one of sweet reasonableness, adopting for our motto, "Live and let live," and whilst the enormous resources controlled by the combine will ensure us against the consequences of any aggressive action of competitors, we quite recognise that a policy of monopoly is out of question, and we have not the slightest intention of aiming at it. We are to-day marketing upwards of 1,000,000 tons per annum of petroleum products, which suffices to assure our shareholders that sufficient crude is always forthcoming to provide this.

It is with the deepest regret that I have to announce the loss of one of the finest vessels in our fleet—the "Silverlip"—carrying a cargo of 8,400 tons of petrol, or about ?,500,000 gallons, the equivalent of a whole month's consumption in the United Kingdom.

I am extremely anxious that it should be thoroughly realised that there is no such thing as spontaneous combustion in petrol, and we have to look for some cause for a disaster which is the more pitiable in that five men lost their lives, and four were injured.

I will explain to you the elaborate precautions taken on the "Shell" steamers to prevent catastrophes on board the vessels. In the first place the engines and boilers are put aft, and are separated from the compartments filled with petroleum or petrol by two bulkheads forming an impassable barrier for fumes or gases to the boiler space.

The heating and cooking on our ships is done by steam, and the lighting by electricity, the installations of which are constantly overhauled, and are installed in the most scientific manner possible.

Now bearing in mind that an explosion can only take place by the application of a live light, we are driven irresistably to the conclusion that the cause of the disaster to the "Silverlip" was reckless smoking by some of the men engaged in the space where the actual explosion on the steamer took place, this being right in the middle of the ship and away from any place where any live fire should have been. The probability of any accident from the electric light must be discarded, this being quite impossible, as at two o'clock in the day the dynamo was not running and the fuses were disconnected.

It is undeniable that in steamers properly constructed the risk of carrying petroleum products in bulk is no greater than that of solid cargo, and it is a matter of great congratulation to those interested in the development of this business, that the Suez Canal Co. have framed regulations permitting the passage of the steamers through the Canal under certain special rules, to which we shall voluntarily add the constant patrolling by officers, in order to obviate the frightful consequences of the selfishness of the man who will smoke in prohibited places, though he knows that his own life and that of others may be the price of his indulgence. The human element is always the most difficult to deal with, and beyond taking such precautions as, if duly observed, should render such a fatality as that which happened to this splendid vessel impossible, we cannot go.

The accounts for the year 1906 are well advanced, and although they are only a matter of platonic interest, seeing that we cannot pay more dividend in respect of that year, yet I think they will furnish satisfactory reading, and we shall do our utmost to present them not later than July.

It only remains for me to formally move the resolution:—

"That the ordinary share capital of the company be increased to £2,500,000 by the issue of 500,000 ordinary shares of £1 each, and that the same be issued at such times, upon such terms and conditions, and for such consideration as the board may from time to time determine,"—which I now do.

Mr. W. F. Mitchell said he had much pleasure in seconding the resolution which had been proposed by the chairman, and in doing so he desired to say that the board had more than carefully considered the interests of the shareholders. Their chairman had laid before the meeting the results of the deliberations of the directors, and he was sure the shareholders would agree with the arrangements that had been made, and would endorse the action of the board. He had recently paid a visit to the company's properties in Koetei, and it would interest the shareholders to know that the information which he obtained on the spot was of a most satisfactory character. From the jungle, a great oil industry had arisen, and they would, he was sure, be pleased to hear that the prospects of the company obtaining a very large supply of oil from their properties in Koetei were extremely satisfactory. Their chairman had in the past, perhaps led them to feel that he was somewhat optimistic in his prognostications; but that day they had fortunately been proved to be correct, and he was sure the shareholders would feel with the speaker that the directors, and their chairman in particular, were rightly convinced as to the great value of those properties. It was very largely due to the great value of the "Shell" Co.'s interests in Koetei that the amalgamation with the Royal Dutch Co. had been brought about, a result which he was sure they would all appreciate.

A Shareholder enquired if the preference shares participated in the new issue, but the reply of the chairman was in the negative. Of course the position of the preference shareholders was greatly benefited, for they got a further £600,000 of capital.

Another Shareholder enquired whether the "Silverlip" which was recently lost in the Bay of Biscay was insured?

In reply to this question, Sir Marcus Samuel said that both the vessel and the oil cargo were fully insured.

The resolution for the increase of capital was then put to the meeting, and carried unanimously.

On the proposition of Mr. Bohrman, a vote of thanks was unanimously passed to the chairman and the directors for the able manner in which they had conducted the affairs of the company. Mr. Bohrman added that the minds of the shareholders were quite at ease, for they felt that their interests were in the best of hands.

The Chairman, in reply to the vote, said he desired to thank the general body of shareholders, both on behalf of his colleagues on the board and himself. He did not propose to say anything else to them that day, because he hoped to meet them very soon with the accounts, when he would possibly have something more interesting to communicate. A little more of the current year would then have passed by, and they might then be able to say something more of their prospects. In the meantime he had only to thank them for the confidence which they had repeatedly shewn in the board.

The meeting then closed.

SCOTCH OIL COMPANY MEETINGS.

THE OAKBANK OIL COMPANY, LIMITED.

Mr. R. T. Moore, presiding at the annual meeting in Glasgow last week of the Oakbank Oil Co., moved that an ordinary dividend of 15 per cent. be paid. In doing so, he said their indebtedness had been reduced by no less than £18,000, and, in addition, £6,750 of share capital had been paid back to the shareholders. They proposed a further increase of the reserve funds. Since the financial year closed, the costs, both in respect of fuel and miners' wages, had further increased, and if not at an end, might become a very serious matter. The improvement in the rating of both the liquid products and of paraffin wax would be sufficient to meet these additional costs. The Oakbank pits had been at work for forty years, and were now nearing exhaustion. These would fall to be discontinued at an early date, but it was satisfactory to know that there was a sufficient supply of shale at Duddingston to compensate for the shortage at Oakbank. Mr. Easton seconded the motion.

The Chairman said the removal of the works would be a formidable business, but at present they had to bring all their crude oil from Winchburgh across to the works, and the saving in having the works on the spot would be considerable.

Mr. Murray inquired the distance between the two places. The Chairman stated that this was about 15 miles by rail. The report was adopted and the retiring directors re-elected.

A Shareholder, in moving the re-election of the auditors, remarked on the demands made by workmen and stated that the time was coming when large employers of labour would require to make a stubborn and determined stand against the calls for increased wages and shortened hours by workmen.

THE BROXBURN OIL COMPANY, LIMITED.

Sir David Richmond, Chairman of the Broxburn Oil Co., Ltd., presiding at the annual meeting last week, in Glasgow, said that the past year's operations shewed an improvement upon the previous year, but no advantage whatever had been gained from the solid productions manufactured by the company. Sulphate of ammonia ruled lower during the whole of the year, wax prices remained practically stationary, but burning oil and other liquid productions had shewn improvement, candles were reduced in price to a limit that gave little or no margin of profit for many years. The leading candlemakers had endeavoured by friendly conferences to maintain a fair margin of profit between the price of wax material on the one hand and the price of the manufactured candle on the other, but some makers in various localities had persisted in selling candles at much lower prices. Within the last day or two an advance in the price of candles had taken place, the prices of naphtha, burning gas and lubricating oils had also been advanced, or were likely to be advanced before next season opened, and it was well that this was so, for the oil companies had to reckon with higher prices for coal and higher wages for miners.

Dr. Dixon seconded the adoption of the report, which was unanimously agreed to.

An extraordinary general meeting was also held, when the articles of association were altered to make the qualification for directors 1,000 ordinary shares.

ROUMANIAN PRODUCTION IN MARCH.

The production of crude oil at the Roumanian oil fields in March has again beaten all previous records. According to the statistics published by the *Moniteur du Petrole Roumain*, it has amounted to 98,331 tons. This figure is incomplete and has to be increased by the output of firms who had not made their returns, and the total may be taken in round figures at 100,000 tons, against 89,726 tons in February.

The provisional figures of the output of the different fields in March together with the final figures for February are given below:—

	March. Tons.	February. Tons.
Prahova District—		
Bustenari	41,663	39,485
Campina-Poiana	21,632	22,395
Moreni	23,180	19,513
Baicoi-Tinta	5,124	3,078
Other Fields	2,252	1,150
Total for Prahova	93,851	85,621
Dambovitza District	2,930	2,726
Buzeu ,,	850	695
Bacau ,,	700	684
Total	98,331	89,726

The excellent results obtained in March are the more gratifying, since for that month a decline in production was anticipated in consequence of the shortage of labour through the mobilisation of the army and other local conditions. It will be observed that the increased output is due to the Moreni, Bustenari and Baicoi-Tinta fields. At Campina the production is well maintained at its recently attained high level.

The production of the leading firms in March, compared to February, was as under:—

	March. Tons.	February. Tons.
Steaua Romana— .		
Campina	20,617	21,430
Bustenari	12,591	13,680
Baicoi	1,401	1,539
Other Fields	1,424	1,134
	36,033	37,783
Regatul Roman Co.	17,558	14,958
Bustenari Co.	11,641	9,722
Romano-American Co.	4,905	4,226
Sylva Co.	3,903	3,341
International Co.	3,936	3,794
Trajan Co.	3,123	1,736
Colombia Co.	2,369	2,313
C. M. Pleyte and Co.	2,317	2,288
Aquila Franco-Romana	1,359	1,193
Seceleanu Bros.	1,310	704
Arnheemsche Petroleum Co.	1,013	1,000
H. F. Drader	1,132	—

The total production of the Roumanian oil fields for the first quarter of the current year, was as under:—

	3 months, 1907. Tons.
Prahova District—	
Bustenari	124,980
Campina	54,983
Moreni	62,797
Baicoi-Tinta	11,420
Other Fields	4,601
Total for Prahova	258,781
Dambovitza District	8,180
Buzeu ,,	2,312
Bacau ,,	2,065
Total	271,338

The total production in the corresponding quarter of 1906 was 181,253 tons, and in 1905 131,123 tons.

A NEW CALIFORNIAN OIL FIELD.

OPERATIONS AT MOODY GULCH.

One of the promising territories in Southern California to-day is that known as Moody Gulch, a branch of the Los Gatos Canyon, which is situated in the western part of Santa Clara county. It has been recognised as a prospective field for about thirty years when operations were commenced there, but it is only lately that the operations have been attended with that success which gives promise of great things in store. The first tests were made, as we have said, about thirty years ago, at which time a Mr. McPherson, who had been prominently connected with oil developments in Southern California, drilled some wells. The formation of the district is generally broken, pitching sharply, a strong stream cutting the shale and sandstone at several points at which strong oil seepages can be found.

The first well, known as Moody No. 1, struck oil at a depth of 800 feet, but a detailed record of operations is not forthcoming. The most recent drilling in the Moody Gulch districts consists of two wells by the New Moody Gulch Oil Co. and the Alma Oil Co. They are located on opposite sides of the Gulch, and near some of the previous operations. The New Moody Gulch well is now down, says a writer in the *Pacific Oil Reporter*, to a depth of nearly 1,700 feet, it being expected that oil will be encountered at 1,900 feet. The Alma Oil Co.'s well has now been abandoned at a depth of 1,350 feet As with the Alma well, the majority of past failures have been caused by the casing collapsing, but with the heavier pipe that is to be used in future work, this trouble will be overcome, and the locality can be fully tested. In the majority of wells drilled, oil was struck, and at one time the oil shipments from the district ran into four figures.

◆

PRODUCTION OF DUTCH-INDIAN COMPANIES.

The production of refined oil of the Dordtsche Petroleum Co., operating in Java during the first three months of 1907 was :—January, 165,000 cases; February, 157,000 cases; and March, 158,000 cases; total for the three months, 424,000 cases.

The production of refined oil of the Mines, Forests and Lands Exploitation Co., of Langkat, Sumatra, in the first three months of 1907, was :—January, 203,185 units; February, 185,389 units; March, 197,551 units; total for the three months, 586,125 units.

The production of crude oil by the East Borneo Co. in April, according to a telegram received from Koetei, amounted to 7,550 tons.

The production of illuminating oil by the Moesi Ilir Petroleum Co., in the first three months of 1907, was :—January, 53,210 units; February, 21,300 units; and March, 11,500 units. In April they produced 44,200 units.

◆

The Gulf Refining Company.—At the annual meeting of the Gulf Refining Co. held recently the following chief officers were elected :—Mr. W. L. Mellon, president; Mr. George S. Davison, vice-president; Mr. G. R. Nutty, general sales manager; and Mr. George H. Taber, general manager.

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Saturday, May 25th, 1907.

TWO IMPORTANT CONSULAR REPORTS.

THE annual reports of the English consuls at Baku and Batoum, which we reprint upon other pages of this issue, are such as will well repay careful perusal. They deal with one of the most momentous periods in the recent history of the Caucasus, and tell in a manner free from bias the precise conditions which there prevail, as well as giving, with as great a care as is possible, a look into the future. From time to time we hear so many garbled statements as to the position of trade both in Batoum and Baku that it is quite refreshing to peruse the present reports which run in neither the optimistic nor pessimistic vein, but record facts as they impress themselves upon those on the spot.

We will for a moment direct attention to the report by Consul Stevens upon Batoum's trade during 1906. Opinions cannot differ in argument that the past year has been one of the most disastrous for this petroleum port. In 1905, as our readers will possibly recollect, Batoum began to lose its tight hold as a centre for the export of Russian oil in bulk and cases, for during that year the volume of shipping dwindled down to a figure the like of which had not been known since Caucasian petroleum became a factor in the world's commerce. But the past twelve months have been even worse, and Batoum's export and import trade has fallen still lower, the figures constituting a record as shewing the downfall of the port. From all points of view, this, of course, is a matter full of regret, though, as regards the bulk export trade, it is certain that the present unfortunate state of things is only of a temporary character. The considerably decreased production at Baku, combined with the general unrest throughout the Caucasus, had a most prejudicial effect upon Batoum's bulk oil exports, yet, as we say, that was only for a time, for, as we write, matters have brightened to a degree the pessimists would have said was impossible in so short a time.

In regard to the trade in case oil, however, Batoum has a sorry tale to tell. The once busy centre of this important branch of the export trade has now lost all its trade and influence, and one by one the case-making factories have closed their doors, until at the present time the trade both in the making of cases and in the case oil exports can only be counted as a dead letter. The effect of this upon the general trade of Batoum has naturally been very serious, for a large proportion of the population is thereby deprived of its living. The effect of the removal of the trade to Alexandria and other Adriatic ports cannot be over-estimated in its importance as affecting the commercial standing of Batoum itself, and it is a very serious blow to the port that its only industry of any importance, employing as many as 6,000 factory hands, will never be rehabilitated. The almost permanently strained relations between employed and employer in the case works played a prominent part in hurling from the ports commerce so prosperous and extensive an industry, and the lesson it teaches should be taken seriously to heart by the workers in the Baku fields, who have yet much to learn in regard to the adoption of conciliatory measures toward their employers.

From start to finish, the Batoum Consular report is a striking illustration of lost opportunities in regard to the development of international trade, and, together with all interested in the general welfare of petroleum commerce, we would voice our deep regret that Batoum is to-day in so deplorable a position. One can only venture to hope that as time goes on the cloud of gloom may be lifted, and that the Black Sea port may again rise, if not like the temple of old to greater pretensions, at any rate to recover much of its now vanished importance.

Turning now to the *resumé* of Vice-Consul McDonell of the oil industry at Baku during 1906, many readers will not be slow to recognise a vast difference between the unprejudiced words of the writer and the effusions of many of those gentlemen in whose hands the safety of English capital rests, and under whose guidance the Anglo-Russian oil companies operate. Mr. McDonell does not paint the picture of Baku with that blackness with which we have now grown familiar. He admits that real progress has been made during the year under review, and that, in spite of times when oil-field operations have been uninterrupted, matters are gradually returning to their normal condition, while in regard to the future, the outlook appears to him, as to ourselves, full of confidence.

One satisfactory feature of the situation—and a feature of too great importance to be overlooked—is that during the periods of unrest through which the Baku fields have passed, the decrease in production of crude oil, which, of course, was inevitable, has brought about more than a proportionate increase in prices, and the result is that the operating companies are passing through a period when large profits ought to be forthcoming. The Vice-Consul emphasises the fact that in any case these enhanced prices for oil are bound to continue for many months to come, and thus it is tolerably certain that the future is full of promise—a period to which we can look forward to with confidence.

The latter portion of the report should especially appeal to English manufacturers who, unfortunately in the past have not been so enterprising in securing oil-field contracts as have many of their Continental neighbours. The result is that slowly, but nevertheless surely, the trade is drifting into other channels, a fact to be regretted. We have repeatedly urged English manufacturers to conform to the conditions which prevail in the Baku fields, and by the adoption of more wide-awake methods to see that they secure at least their fair share of trade, and now that the Vice-Consul has seen fit to lay special stress upon this in his report, we trust that the opportunities presented will not be allowed to slide further away.

As we have already said, both the reports to which we have referred are not only well worthy of perusal, but will amply repay careful consideration, and are bound to do a distinct service, if only to clear the atmosphere, and point out to everyone concerned what are the exact conditions prevailing in those much-talked-of portions of the Caucasus.

LONDON OIL SHARE MARKET.

FRIDAY, MAY 24TH, 1907.

Notwithstanding the serious depreciation in value throughout most departments of the London Stock Exchange, business has been slightly more active in the Oil Section, where many shares have changed hands during the past fortnight.

The first change from our last prices occurred on Tuesday week when Baku Ordinary rose 6d. to 3s. to 4s., and Shell Transport Ordinary were very strong at 49s. 6d. to 50s. 6d., thus registering an advance on balance of 2s. 3d. per share, while the Preference were a closer market at $9\frac{3}{4}$-10. On the other hand, Russian $5\frac{1}{2}$ per cent. Debentures were not quite so good at 86-89, and both issues of Californian Oilfields were quoted 6 to $6\frac{1}{2}$.

With Wednesday's dealings, through the dividend being deducted from Californian Oilfields, the price was only $5\frac{7}{8}$-$6\frac{1}{8}$, and Californian Refineries and Shell Ordinary were not quite so good at $1\frac{5}{8}$-$1\frac{7}{8}$ and 48s. 6d. to 49s. 6d. respectively, though Shell Preference were better at $9\frac{7}{8}$-$10\frac{1}{8}$.

On Friday, Anglo-Russians altered to $\frac{3}{32}$-$\frac{5}{32}$, and Californian Oilfields were $5\frac{15}{16}$-$6\frac{3}{16}$. The Stock Exchange was closed on Saturday and the following Monday (Whitsuntide holidays), and on the resumption of business on Tuesday the only change was an advance in Shell Transport Ordinary to 49s. 6d. to 50s. 6d., while subsequent movements only consist of alterations in Californian Oilfields to $5\frac{7}{8}$-$6\frac{1}{8}$, Anglo-Russians to $\frac{1}{8}$-$\frac{3}{16}$, and Spies to $\frac{3}{8}$-$\frac{7}{16}$. The Mid-May Settlement, which had been of 19 days' duration commenced on the 13th inst. The business to be adjusted in the Miscellaneous Section proved to be very light, and Contango rates were moderate, 5 per cent. to 7 per cent. being exacted for the continuation of Oil Shares.

Alterations in making up prices from those fixed at end April were as follows:—Advances—Anglo-Russians $1\frac{1}{2}$d. per share at 2s., Baku Ordinary 9d. at 3s. 6d., Preference 1s. 3d. at 6s., Schibaieff Ordinary 6d. at 5s. 6d., and Shell Transport Ordinary 3s. at 48s. Declines—Californian Oilfields $\frac{1}{8}$ at $6\frac{3}{8}$, Russian Ordinary 1s. 6d. at 6s., and Russian Preference $\frac{1}{16}$ at $\frac{3}{8}$. Schibaieff Preference at $2\frac{1}{8}$ shewing no change.

The Petroleum Trade of . . Batoum during 1906. . . .

Important Consular Report.

The annual report of Mr. Consul Stevens, dealing with the trade and commerce of Batoum for 1906, has just been published, and forms an interesting and at the same time a very important *resumé* of the events during the past twelve months at this centre of the Russian petroleum export trade.

Mr. Stevens points out that the year 1906 ended, as it began, under the shadow of uncertainty and crisis, there being a total absence of any indications of that increased prosperity in most branches of industry and trade in the Caucasus which was so marked in other parts of the world during the past year.

General unrest and local troubles, on the one hand, combined with periodical strikes, a serious strife between capital and labour, and racial conflicts of Armenians and Tartars on the other, all helped to reduce the population of the Caucasus to a state of ruin and desolation.

In view of these conditions it is not at all surprising that the economic, industrial and commercial interests of the Caucasus have suffered so considerably, and that all classes of society should have been more or less affected by the existing abnormal state of affairs during the period under review.

Under the influence of the disastrous consequences which the prevalent unrest and other disorders in the Caucasus for the past two years have occasioned to the trade and industries of the whole region, the commerce of Batoum suffered very considerably, and never yet have the figures of the exports and imports from and to this port been as low as for the year 1906. In other words, the trade of Batoum has fallen off to so great an extent that a large proportion of the inhabitants have been deprived of the means of earning a living. The situation in this respect has become so serious, that the finances of the town are in jeopardy, and our municipal authority, in order to secure regularity in the payment of rates, etc., and with a view to diminish crime have awakened to the necessity of seriously occupying themselves, among other things, with the question of employing those persons who have been thrown out of work. The construction of water works have therefore been undertaken, works for the prevention of the inundation of certain parts of the town by inrushes from the sea during bad weather are in contemplation, harbour improvements, with the introduction of proper equipment and appliances for a modern port, are proposed.

There is no doubt that the question of bringing about a revival in the general trade of Batoum is one which, before very long, must seriously occupy the minds of the members of the municipality and the merchant classes at this port, seeing that if any of the petroleum case-making factories are now working, they are simply doing so either because they still have a limited sale for their cases or cans in Turkish ports, or for the purpose of using up their large stocks of wood at this port, and which have been here so long that it is feared the wood might rot.

I regret to have to report that there are no indications of further development in the import trade of British manufactured goods into the Trans-Caucasus, the volume of which has always been small. Although the quantity of certain goods imported — principally machinery—was considerable during the year 1906, the apparent flourishing condition of the trade is exclusively attributable to the sudden demand for machinery created by the erection of new plant to replace machinery which was burned down during the fires at Baku, and consequently it is not likely to be of permanent duration. No coals were imported from the British Isles during the year, and a considerable decline has taken place in the imports of tin plates. I cannot help being a little sceptical as to the possibilities of greater activity in the export trade of the United Kingdom to the Caucasus. Do what one may in the direction of developing greater commercial intercourse between the two countries, it is sure to fall short of the desired effect so long as the present heavy and almost prohibitive customs tariff on all imported goods, and the system of granting long credits to tradesmen (often covering periods up to one year), remain in force. Under these conditions it is well nigh impossible to compete with any degree of success with goods made within the limits of the Empire by Russian and German manufacturers.

The exports of kerosene in cases from the Caucasus to India having ceased—only one cargo of about 20,000 cases was shipped to Bombay during the year—there is practically no commercial intercourse between the Caucasus and British possessions.

A new line of British steamers between Liverpool and Batoum was opened by Messrs. Moss and Ellerman, shipowners, of Liverpool, during the year under review, and hopes are generally entertained that these gentlemen will succeed in their new enterprise. It was felt that a direct line of steamers with the United Kingdom was required, although I presume some time will yet elapse before a trade of any importance in other goods except petroleum products between the two countries can be worked up.

The one great disadvantage at the port of Batoum is the unsafe condition of the harbour in bad weather, and during the winter months frequent storms visit the port. In view of the immense inconvenience which the unprotected condition of the port occasions to commerce, it is surprising that no steps should have ever been taken to render the port a safe shelter for shipping, or efficiently to safeguard vessels from the consequences of obnoxious gales from any point of the compass between S.S.W. and N.N.W. On occasions of this kind, when the harbour is full of shipping, the port presents a perfect pandemonium of infuriated choppy seas and underground swells, of ships rolling, pitching, plunging and ranging at their moorings, parting hawsers, wire ropes and cables, and colliding with other vessels, doing serious damage to themselves, other shipping and the harbour. Steamers, after breaking away from their moorings, have often been obliged to proceed to the roads or out to sea to weather a storm.

The pipe line between Baku and Batoum was completed during the past year, and is now, I understand, in good working order. Unfortunately this line did not exist when it was most needed, and now that the pipes cover the whole distance between the two towns just mentioned, it would appear there is very little kerosene to pump through the pipes.

The rate of 19 copecs per pood charged for the conveyance of the oil from Baku to Batoum is considered excessive by oil merchants and producers, who, I believe, have petitioned the Government with a view to obtaining a reduction of the present rate. It is very possible that the Government will take a favourable view of this question, and will grant the desired rebate, which will probably enable petroleum merchants to compete more successfully with Russian oil in foreign markets. The general opinion, however, appears to be that the trade in kerosene to foreign countries to this port cannot increase to any very great extent so long as the prices of crude oil at the wells at Baku remain at their present high level. With the price of crude oil fluctuating between 26 and 28 copecs per pood on the spot, it is very improbable that producers will engage extensively in refining kerosene. Of course, during the winter months, when the demand for crude oil is less, in consequence of the freezing up of the River Volga, a certain amount of kerosene will always be exported from Batoum; but later on in the season, when the navigation on this river opens, I fully expect the shipments of oil from Batoum will decline, and the exports of kerosene in 1907 are not likely to shew better results than they did in 1905.

In view of the prevailing high prices of crude oil during the year 1906, the Trans-Caucasian Railway, which has been using liquid fuel for its locomotives, water pumping stations, workshops and in a great measure, for domestic purposes, for close upon twenty years, has now decided to suppress liquid fuel in favour of coal, and it is reported that the administration of the railway has even gone so far as to issue orders that all locomotive and other furnaces should be forthwith converted for the use of coal fuel.

Of the four or five petroleum case and can-making factories which were operating at Batoum in 1904, and subsequently ceased work in consequence of the trouble they experienced with their workmen, only two recommenced work in 1906—one in the early part of the year and the other at a later date. With these two factories things appeared to have been working smoothly enough throughout the year, and, so far as outside observers were able to judge, no difficulties were raised by the workmen. In view of the abnormal conditions obtaining during the year in the oil industry of the Caucasus the largest existing factory at Batoum was not able to recommence work, and the board of directors of the company have, I understand, definitely come to the decision not to resume. Accordingly most of the stocks of wood and tin plates which the company possessed at Batoum were sold and re-exported during the past year. The other factories will hardly be able to continue their production of cases for very long, seeing that a large number of places in the Far East, such as Burmah, Sumatra and Borneo, which are situated much nearer to India, where in former years the mineral oil trade was exclusively carried on in cases, have now had tank storage accommodation installed at the ports of discharge of the oil, to which kerosene is carried in tank steamers and canned for distribution in the inland markets of the country. Besides which, the countries just referred to have come sufficiently forward recently to furnish Indian, Chinese, Japanese and other markets which used to take oil from the Caucasus with illuminating oil.

The stock of petroleum products at Batoum on December 31st, 1906, was:—

	Quantity. Poods.
Illuminating oils	4,408,999
Lubricating ,, ...	1,160,168
Residuals	257,217

PETROLEUM IMPORTS INTO THE UNITED KINGDOM DURING APRIL

THE SHIPMENTS INTO VARIOUS PORTS.

In the following table we give the various shipments of petroleum products into the ports of the United Kingdom during the month of April. The total quantities imported amounted to 24,900,690 gallons as compared with 17,002,320 gallons in March, 21,200,000 gallons in February, and 28,000,000 gallons in January. It will therefore be seen that though the figures are behind those of January they are in advance of the totals of February and March.

During the month the illuminating oil imports accounted for exactly 50 per cent. of the total imports.

	Lubricating.	Illuminating.	Residuals.	Benzine.	Other Products	Fuel.	Gas.
Aberdeen	1,000	—	—	30,000	—	—	—
Barrow	—	133,610	—	913,760	—	—	—
Belfast	1,790	—	—	—	—	—	—
Bristol..	380,010	23,800	—	—	1,236,120	—	199,690
Cardiff	—	567,000	—	—	—	—	—
Cork	200	—	—	—	—	—	—
Dundee	3,960	—	—	—	—	—	—
Glasgow	433,800	—	—	10,000	7,600	—	—
Goole	1,630	—	—	—	—	—	—
Grangemouth	8,480	3,200	—	—	—	—	—
Grimsby	3,100	—	—	—	—	—	—
Hull	183,850	438,210	—	21,800	6,080	—	—
Lerwick	120	200	—	—	—	—	—
Leith	86,520	7,720	—	—	—	—	—
Liverpool	835,440	1,670,720	34,680	57,570	15,820	—	—
London	1,522,990	8,502,930	9,810	2,167,390	2,250	112,000	2,542,260
Manchester	949,490	1,131,850	—	—	14,340	—	618,080
Middlesboro'	1,480	—	—	—	—	—	—
Newcastle	6,200	440	—	—	—	—	—
Swansea	800	—	—	—	—	—	—
Totals	4,420,860	12,479,680	44 490	3,200,520	1,282,210	112,000	3,360,930

LATEST INFORMATION FROM THE CALIFORNIAN OIL FIELDS.

The latest information from the various Californian fields goes to shew that activity is prevailing on every hand, drilling being pushed forward in the several localities as rapidly as possible. This especially applies to the Santa Maria field, where the two most recent companies to commence operations are the Hong Kong Oil Co. and the Diamond Oil Co. In the Coalinga field the outlook was never brighter than at the present time. Development work on the east side of the field has received a great impetus owing to the productivity of the Lucile well, which, now having been cleaned out is good for over 2,000 barrels per day. It is reported that there is growing carelessness on the part of operators to shut off the water in abandoned wells. So far little damage has been done, but it is certain that if this carelessness continues the results will be very serious, and possibly a repetition of the sad occurrences of a few years ago in the Kern River field may be encountered.

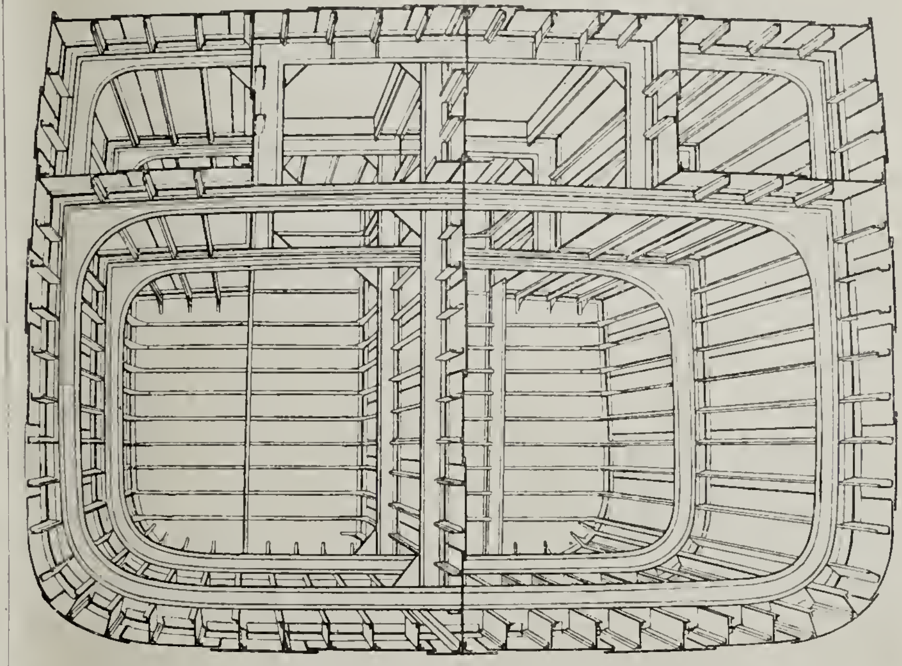
From the Kern River field we learn that considerable activity is apparent, and companies that have done very little development work during the past few years are now actively resuming operations.

Though the water trouble is being felt in some sections of Coalinga, it appears to be confined to comparatively small localities. The Kern Trading and Oil Co. is probably the most energetic company in the field at the present time, for it is now preparing to drill no less than 58 wells, but not far behind is the Associated Oil Co., the largest holder of territory in the field, for it is expected to sink fifty wells during the present year.

The necessary pipe for the new pipe line of the Standard Oil Co. to the oil fields of the Midway and McKittrick districts is already on the ground, and the sixty-eight miles will be laid down as rapidly as possible. The building of this line is the result of the contract recently signed by the independent producers of the Midway fields by which the Standard Oil Co. obtains the oil of the district for 30 cents per barrel. This new line will be ready to handle oil in the course of six months.

A NEW SYSTEM OF SHIPBUILDING APPLICABLE TO OIL TANKERS.

A new system of shipbuilding has recently been put forward by Mr. a Isherwood, and is now being keenly discussed in marine circles. This system takes advantage of the fact that the modern cargo carrying ship is of constant section for the greater portion of the length, and so most of the structure of the ship can be punched and prepared from drawings and hoisted into place with the greatest rapidity and ease, very little bending being required. Mr. Isherwood dispenses with the transverse frame as we ordinarily understand it, and fits at intervals of 15 to 20 feet, deep transverse web frames, which extend right round the ship, forming a frame and beam combined.



A New System of Shipbuilding Framing of Oil-Carrying Vessel.

With a ship having a double bottom this frame is broken at the tank top, and it is proposed to carry this top level across to the ship's bilge, although the tank can be ended and the continuity of transverse strength obtained, as shewn in the perspective view. For an oil-carrying ship there is no double bottom, and so the transverse web is carried up one side of the middle line bulkhead. The system seems specially adapted for oil tankers, as full advantage can be taken of the numerous transverse bulkheads necessary for the formation of the oil tanks.

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THE DEUTSCHE PETROLEUM ACTIEN-GESELLSCHAFT.

The Deutsche Petroleum Actien-Gesellschaft is the company formed by the Deutsche Bank to take over and manage all the petroleum enterprises controlled by the said bank, including the Steaua Romana in Roumania, the Schodnica Co. in Galicia, the Kasbeck Syndicate in Grosny, and a group of enterprises in the Wietze oil fields of Hanover.

The board of the Deutsche Petroleum Actien-Gesellschaft consists of:—Mr. A. Gwinner, Manager of the Deutsche Bank of Berlin, Chairman; Mr. M. Steinthal, Councillor of Commerce, Berlin, Vice Chairman; and Messrs. O. Braunfels, Councillor of Commerce, Frankfurt-on-Maine; G. Gothein, retired Councillor of Mines, Member of the Reichstag; F. Kuranda, Manager of the Wiener Bankverein, Vienna; K. Mommsen, Manager of the Mitteldeutsche Kreditbank, Member of the Reichstag, Berlin; R. Witting, Privy Councillor, Manager of the National Bank füer Deutschland, Berlin, and I. Zeller, Manufacturer of Berlin. The Manager is Dr. Arthur Herz.

The third ordinary annual meeting of the company took place recently, when the following report was submitted by the directors.

The third year of the working of the company was of special importance for the petroleum enterprises of the concern. It was in the past year that an agreement has been arrived at between the Petroleum Produkte Actien-Gesellschaft, belonging to the company's circle, and the firms engaged in the sale in various European countries of the oil of the principal Russian producers. In order to bring about the concentration of the different European selling organisations, which hitherto were competing among themselves, a company was formed called the Europaeische Petroleum Union This company takes over from the present owners the tank steamers used for carrying petroleum to the selling markets in Europe; as to the installations used for selling illuminating oil, these will be handed over to the companies affiliated to it in the different countries.

In the Europaeische Petroleum Union are interested the principal Russian producing firms as well as those interested in the Petroleum Produkte Actien-Gesellschaft with the exception of the Shell Transport and Trading Co., Ltd., which was not taken in the new combination, and which has completely withdrawn from the European petroleum trade.

The association of the company's group with the principal Russian producers with a view to common action in sales, is based on the view that the Russian and Roumanian producers when competing against each other, are too weak to maintain themselves against the powerful American petroleum trust, whose action is directed in a uniform manner. It is hoped that by putting an end to this competition and with the reduced cost of the selling organisations, resulting from common action, it will be possible to gain sufficient strength in order to be able to say that the prospects of the Europaeische Petroleum Union are favourable.

The Steaua Romana has unfortunately not been able during the year ended 30th April (o.s.), 1906, to increase its production to any considerable extent. The production during the year amounted to 218,473 tons against 209,797 tons in 1905. This comparatively poor result is due to the non-working of the electric power installation chiefly used for operating the wells of the Steaua Romana and must not be attributed to any fault of the management. Towards the end of the past financial year this drawback was definitely removed by the construction of a new central electric station, and the production of crude oil has since then been growing in a satisfactory manner, quite answering all expectations. The company was compelled to increase its holdings of petroliferous lands, both private and Government property. On October 1st, 1906, these lands exceeded in area 30,000 hectares. Considerable sums have also been employed for increasing the company's facilities for producing and refining the crude oil, as well as for the storage and transport of the manufactured products.

In order to strengthen the position of the company it was proposed at an extraordinary general meeting held on December 19th, 1906, to issue new shares for 6,000,000

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marks. The meeting sanctioned the issue, which was taken up by a French group of capitalists, with the object of placing it on the Paris Stock Exchange.

After making ample provision for depreciation and reserve fund, the company found it possible to distribute a dividend of 6 per cent.

The directors of the Deutsche Petroleum Co. have sold their holding in the Erdoelwerke Wietzedorf Co. of Celle, Hanover, to the Deutsche Mineraloel Industrie Actien-Gesellschaft, a company formed by the Deutsche Petroleum Co. in co-operation with A. Schaafenhausenscher Bank Verein and the Internationale Bohrgesellschaft of Erkeleuz, in September of last year. This company, in addition to the holding of the Deutsche Co., has also acquired the holdings in various Hanover petroleum enterprises of the last mentioned firms. Considerable advantage is expected to be derived from this concentration and the uniform method of exploitation of the extensive contiguous lands which will result therefrom.

The boring activity of the Kasbeck Syndicate, Ltd., has yielded better results than in the preceding year, nevertheless there are no profits to record yet for this company. The Deutsche Co.'s small holding in the concern still figures in the accounts at 1 mark.

The Schodnica . A.G. füer Petroleum Industrie, of Vienna, has this year also distributed a dividend of 6 per cent. Although affairs in the Galician petroleum industry are rather disturbed and for the present nothing certain can be said about the prospects, the Schodnica Co. will probably be able to distribute for the the year just concluded also a satisfactory dividend, the amount of which has not yet been fixed.

The Petroleum Produkte Actien-Gesellschaft has in its last financial year had to bear a severe competition from its American and European competitors. The company is therefore not in a position to distribute any dividends. The profit, amounting to about 150,000 marks, was carried forward to this year's account.

The debtors figuring in the balance sheet represent the sums which the Duetsche Co. has to receive from the companies affiliated to it, sums which have since been repaid with the exception of some small items.

The company's profit for the past financial year amounted to	1,054,065·65	marks.
Of this sum 5 per cent. will be written off for the statutory reserve fund	52,703·28	„
The Balance of	1,001,362·37	„
With balance of last year's profit	81,508·30	„
Make a total of	1,082,870·67	„

This profit permits of the distribution of a dividend of 5 per cent. However, having in view that the transfer of the installations of the Petroleum Producte Actien-Gesellschaft to the Europaeische Petroleum Union and that some losses may result from this transaction and the liquidation of the affairs of the Petroleum Produkte Co., also having in view the uncertainty of the prospects of the near future, the directors propose to renounce the distribution of dividend for the past year, and to carry over the whole of the net profit to this year's account.

The balance sheet of the Deutsche Petroleum Actien-Gesellschaft made up to the 30th September, 1906, shews assets:—Cash at bankers, 99,594·61 marks; holdings in petroleum companies, 19,890,473·31 marks; debitors, 1,897,747·47 marks. The liabilities include:—share capital, 20,000,000 marks; reserve fund, 92,507·66 marks; creditors, 659,734·78 marks; and profit, 1,135,573·95 marks.

AMERICAN NOTES

An Enormous Production.—It is reported that the Mid-Continent field has now passed the 100,000 barrel mark, while the Illinois field is now on the eve of active development. It is predicted that by the middle of next month these fields will have a combined production of at least 200,000 barrels per day.

A Refined Pipe Line.—The Union Petroleum Co. has now secured the necessary rights of way for a 2-inch pipe line to run from the Wellsville refinery to West Bingham, Pa., where a connection will be made with the United States pipe line. This move has been rendered necessary owing to the shortage of tank cars on the railway.

In Southern California.—Orange county is coming to the front as one of the producing localities in Southern California, for two new districts have been brought in within a few weeks. One is quite near to the Fullerton district, and here the first well drilled has been brought in on the Union Oil Company's property, being a good producer.

Another Pipe Line.—It is reported that work has already commenced on the new 8-inch pipe line of the Associated Oil Co. between Gaviota and the Santa Maria field. The refinery at Gaviota is being enlarged by the addition of twenty stills and a 55,000 barrel tank is under construction. When completed the pipe will be twenty miles long.

Oil Prospecting in Tennessee.—Parties from Ohio have recently been prospecting for oil at Tillahoma, Tenn., and from statements made by one of the operators it would appear that the indications of success are very promising. It is stated that if the owners of the land prospected upon will enter into a fair agreement, two wells will immediately be sunk.

In the Jennings Field.—In order to prevent the pollution of the fresh water for irrigation purposes in the rice fields throughout Louisiania, the oil operators of Jennings are now storing the salt water obtained from the wells in the large tanks which formerly contained oil. It is estimated that nearly 6,000,000 barrels of tankage are thus filled at the present time.

Is it Another Oil District?—A correspondent to the *Petrolia Advertiser* stated that the Malone Mining and Coal Co. have recently drilled four shallow wells near Davis Station, Portgage county, and all are good producers. The oil was found while drilling test holes for coal, and was reached at depths varying from 113 to 130 feet. Great excitement now prevails in that district, and operators are flocking to secure leases.

Annual Report of the Higgins Company.—The annual report of the Higgins Oil and Fuel Co. states that during the past year the net earning of the company has been $175,800. During the year the company has changed the character of its business from that of producers to that of purchasing, handling and selling oil and its products. Their surplus assets over liabilities are put at $86,128.

Oil in Nevada.—It is claimed that oil has been discovered within three miles of Beatty, Nev., which, if correct, means that it will now be possible to develop districts which hitherto have been impossible of development. Experts who have been making tests in the newly-discovered oil district report that the belt covers several miles and that there is strong pressure of natural gas with abundant evidences of asphaltum.

An Important Deal.—A deal has just been consummated by the terms of which the King Keystone Oil Co. has acquired all the holdings of the Monarch Oil Co. in the Sunset oil district. It is the intention of the purchasing company to construct a refinery on the property with a capacity of 3,000 barrels daily. The King Keystone Co. has also purchased all the holdings of the Alameda and Occidental Companies.

Large Contract for Santa Maria Oil.—A very large contract involving nearly $3,000,000 has been signed by the Standard Oil Co. and representatives of three of the largest independent producing companies in the Santa Maria field. The contract is to run for three years, and calls for the delivery of 145,000 barrels per month at 50 cents per barrel. This contract is, says the *Pacific Oil Reporter*, regarded as the greatest stimulus the oil industry of the State has received in recent years.

THE ROUMANIAN PETROLEUM ASSOCIATION.

On the 1st of May a meeting of the Roumanian Petroleum Association took place, Mr. C. Alimanestianu being in the chair, assisted by Mr. C. Osiceanu, special Government delegate.

In a former issue of the Review we referred to the reorganisation of the Roumanian Petroleum Association, with a view to its undertaking, in accordance with the new requirements of the Mining Laws, to establish and maintain institutions required in the interests of the petroleum industry, and generally watch over its welfare. This would include the establishment and maintenance of hospitals, ambulance, fire brigades, police, etc. A pattern has probably been taken from the Petroleum Association of Baku, but however, unlike Baku, the Roumanian oil fields are scattered over a wide area, and each locality has its own peculiar needs, for which it is considered unfair to tax all the rest, it was resolved to divide the oil producing zone into districts and establish separate committees, which will locally raise the funds required to satisfy the special needs of the industry in the given district. Matters concerning the whole petroleum industry will remain in the hands of the Central Committee of the Association, who will for that purpose levy a general tax on all petroleum firms.

The meeting above referred to was called for the purpose of forming the District Committees, and it was resolved to appoint these at the following places, Bustenari, Campina, Baicoi-Tinta and Moreni. The Bustenari Committee is to be presided over by the Bustenari Co.; the Campina Committee by the Steaua Romana Co.; Baicoi-Tinta Committee by the Trajan Co., and the Moreni Committee by the Regatul Roman Co.

Immediately after the formation of the committees, the question of the work before them was taken up for discussion, this being the establishment of hospitals.

The proposal made at first to establish one central hospital for all these districts was rejected, owing to the difficulty for firms operating in the outlying fields to avail themselves of the aid of a central hospital. It was therefore resolved to erect separate hospitals in each district. For the present it was resolved to build two hospitals—one at Bustenari and another at Campina; and the cost to be borne by the producers in Bustenari, Campina and Moreni. In the outlying fields, which will be at a great distance from the hospitals, infirmaries will be established, and a trained staff provided for rendering first-aid to employés of the petroleum firms.

The funds for building and maintaining the hospitals and infirmaries will be raised by a levy on the producing firms in proportion to the quantity of crude oil produced by them.

The construction of the hospitals and infirmaries will be begun in course of this year.

◆

MORE ABOUT THE FERGHANA FIELDS.

The Ferghana oil field continues to form the subject for discussion in the Russian press and to engage the attention of industrial and commercial circles. In this connection it is interesting to give the following summary of a geological investigation of this oil field, published by the *Trade and Industry Gazette*, from which it may be possible to draw some conclusions as to the industrial value of the deposits.

At the time when this investigation was carried out, in the locality of Kamysh-Bashi, in the Ferghana Province, petroleum was obtained from hand dug wells, 70 to 120 feet deep; these wells were generally full of water, which was very salty and saturated with sulphuretted hydrogen. The strata in which the oil was found consisted of slates covered by thick layers of limestone. The oil was found both in the limestone and the slate formations.

Five versts to the north of Kamysh-Bashi, there are large ozokerite mines, the interior of which clearly shews the way the oil occurs in the strata; it is placed in nests or pockets connected one with the other by means of cracks and natural ditches. These cracks are often full of ozokerite. The roofs of these nests are often covered with sulphur crystals. It is evident that this is the primary deposit of the oil and from here it extends to the strata lying above or under it. It is clear that such deposits do not hold out any hopes of a large output. Even if there were in the vicinity any porous formations, such as sand or even soft sandstones, these may be impregnated with oil, but they cannot form the object of any lasting exploitation. Similar observations have also been made in other parts of the Ferghana oil fields.

CLASSIFIED IMPORTS INTO UNITED KINGDOM UP TO MAY 20th, 1907.

IN GALLONS.

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Country.	Illuminating.		Lubricating.		Residuals.		Gas Oil. (Solar)		Benzine.		Fuel Oil.		Other Descriptions.		Totals.	
	Since May 6.	From Jan. 1.	Since May 6.	From Jan. 1.	Since May 6.	From Jan 1.	Since May 6.	From Jan 1.	Since May 6.	From Jan. 1.	Since May 6.	From Jan. 1.	Since May 6.	From Jan. 1.	Since May 6.	From Jan. 1.
Austria ...	—	—	—	61,640	—	67,770	—	—	—	—	—	—	—	—	—	129,410
Belgium ...	—	153,410	31,870	224,590	—	—	310	310	—	—	—	—	—	590	32,180	3 8,900
Canada ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dutch India.	—	—	—	—	—	—	—	—	1,428,090	7,981,760	—	—	—	—	1,428,090	7,981,760
Germany ...	3,400	1,131,230	56,220	602,180	—	2,000	—	—	—	80	—	—	—	2,200	59,620	1,737,690
Holland ...	—	920	—	4,710	—	—	—	—	5,280	246,530	—	—	6,720	53,730	12,000	305,890
Roumania ...	—	3,660,810	—	—	—	—	—	1,964,000	—	1,459,000	—	238,700	—	—	—	7,322,510
Russia ...	1,682,330	12,612,340	5,280	2,086,950	—	—	—	—	—	2,400	—	—	—	120	1,687,610	14,701,810
U.S.A. ...	5,372,780	35,809,670	1,379,380	15,403,460	—	448,690	3,543,560	20,728,510	1,044,640	2,420,420	—	1,332,000	7,090	651,870	11,347,450	76,794,620
Other Countries	370	950	—	16,750	—	—	—	—	—	2,500	—	40	—	840	370	21,080
	7,058,880	53,369,330	1,472,750	18,400,280	—	518,460	3,543,870	22,692,820	2,478,010	12,112,690	—	1,570,740	13,810	709,350	14,567,320	109,373,670

THE OIL FIELDS OF CALIFORNIA.

Description of the Los Angeles and Puente Hills . . Districts. . . .

(Continued from page 274.)

Any one at all familiar with the conditions of occurrence of petroleum in the California fields knows that any but the most tentative predictions as to the location of the oil are extremely hazardous. The following conclusions, based on the evidence in hand, although lacking definiteness for obvious reasons, may be of some assistance to those carrying on development in the Los Angeles fields.

All of the evidence, both geologic and that obtained by exploitation, indicates that the productive territory in the region of the eastern central and western fields has been largely developed, in fact overdeveloped, for the most part. It is very improbable, therefore, that prospecting outside of the already proved productive area, either immediately north or south of the oil belt, would result in success.

Certain outcropping oil sands in the ravine occupied by the old rapid transit railroad track indicate that oil-bearing strata underlie the region east of Los Angeles river and south of this ravine. A number of wells have been sunk in this territory, however, and the greatest recorded production has been that of the Scott and Loftus well No. 1, which is said to have yielded seven barrels of 17° B. oil per day. It is to be borne in mind that the deepest well so far sunk in this territory is less than 1,000 feet deep and that deeper wells farther down the dip than those already drilled may possibly yield better results, providing water does not interfere with their operation.

The structure of the Fernando sand and gravel in the area north-east of Brooklyn Heights appears to be analogous to that in certain productive areas in the eastern field, as well as in the Puente Hills and Sulphur Mountain (Ventura county) fields. Moreover, the area mentioned is in the same formation and lies in the strike directly between the eastern field and the Whittier field. It does not seem improbable, therefore, that oil-bearing strata underlie the area here considered, although no direct evidence, such as seepages and brea, are known in the vicinity.

Were the thick deposits of Pleistocene and late Fernando sediments that conceal the structure of the older beds in the Raphetto hills removed, these hills might be found to offer a remunerative field for exploitation with the drill.

It seems probable that the productive zone of the Salt Lake field extends northward and possibly a little westward from the territory now developed. Just where the northern limit is located is problematical, but it is quite certain that it is considerably south of the base of the Santa Monica mountains. Within this northern extension the beds in general dip to the west, and for this reason the most productive area will doubtless be found west of La Brea road. East of this road the oil sands approach the surface and consequently yield smaller quantities and heavier oil than the same beds farther down the dip.

The region south-east of the Salt Lake flexure, as shewn by several wells, does not appear to offer many inducements for exploitation, at least in the immediate vicinity of the Salt Lake field. Farther east, however, in the region west and south-west of Westlake Park, should deep wells strike a local flexure similar to that in the Salt Lake field they would doubtless yield large quantities of oil and gas. If the disturbance or fracture already mentioned as occurring in the vicinity of the lagoon does not have a north-western extension, terminating the Salt Lake flexure and the productive zone on its north-western flank, then it appears highly probable that deep wells will strike productive sand in the southern part of section 20 and the northern part of sections 29 and 30, T. 1 S, R. 14 W.

Outside of the territory mentioned in the preceding paragraphs there is little or no evidence of remunerative oil deposits in the immediate vicinity of Los Angeles. Were it not for the great thickness of Pleistocene sand and gravel, which cover the great Los Angeles Plain from the Santa Monica Mountains and Raphetto Hills to the ocean, it would be more than likely that productive territory could be developed over this plain. At least it is almost certain that the oil-bearing strata underlie it, but whether or not the structural conditions are at any place conductive to the accumulation of gas or oil in paying quantities can be determined only by costly exploitation with the drill.

Storage.—The storage facilities of the eastern, central and western fields are largely confined to wooden tanks in the producing territory. Many of these are small, so that as a rule the operators are unable to hold their product for any considerable length of time. The storage capacity of the refineries in the city is also small, few of the individual refineries having a capacity of over 25,000 barrels.

The storage capacity of the Salt Lake field, on the contrary, is about 390,000 barrels. Steel tanks, holding 20,000 to 55,000 barrels, are largely used in this field, although wooden tanks are employed in a few instances.

Transportation.—The oil from the city fields is in large part used locally, being delivered in tank waggons. No pipe lines of any great length exist in the city. The largest is the Union Oil Co.'s lines, from First Street and Lake Shore Avenue, in the central field, to the Southern Pacific Railroad at Palmetto and San Matea streets, a distance of about four miles. An eight-inch pipe line connects the Salt Lake field directly with Los Angeles, and smaller lines run from some of the properties to tanks and racks on the line of the Los Angeles Pacific Electric Railroad immediately south of the fields.

THE PUENTE HILLS OIL DISTRICTS.

The second monograph dealing with the Californian oil field regions covers the Puente Hills oil districts, in which are a number of prominent producing localities. This district of Southern California is now producing 2,000,000 barrels of oil per annum, and consequently ranks as one of the most important territories of the State. The report, which we present below, has been prepared by Mr. George H. Eldridge. The author points out that the Puente Hills, along the southern face of which has been developed one of California's most productive oil territories, are situated in the south-west corner of the State, beginning at a point about 12 miles slightly south of east of Los Angeles and extending in a general east south-easterly direction for 22 miles to Santa Ana River. They cover an area, roughly, of about 140 square miles. The western and northern parts of the hills lie in L s Angeles county, the south-eastern part is divided between San Bernardino county in the north and Orange county in the south. They are situated but 35 miles from San Pedro, the principal deep-water harbour of Southern California.

The developed oil fields of the Puente Hills include the Whittier, immediately east of Whittier, the La Habra, on La Habra ranch, three miles south-east of the Whittier field; the Puente, on the summit of the ridge in its most contracted portion; the Brea Canyon, one mile and a half south-east of Fullerton, and the Chino, about five miles south-west of Chino. The last-mentioned field, although within the general anticline of the Puente Hills, is independent of the other petroleum producing areas, which lie at intervals along the belt of highly disturbed strata on the south side of the hills.

Whittier Fields.

The producing territory of the Whittier oil fields lies on the southern slope of the Puente Hills, beginning within a mile of the town of Whittier and extending in a S. 65° E. direction about two miles and a half.

The wells of the Whittier field draw their supply wholly from the members of the Fernando formation. They range in depth from about 800 feet close to the fault line to nearly 2,500 feet at a distance from the break, the width of the productive zone as at present developed varying from an eighth to a quarter of a mile The sandy members of the formation, rather than those of the clayey consistency, yield the petroleum, although in some instances the material is comparatively fine, while in others it is coarse and even conglomeratic. The gravity of the oil varies from 16° to 23° B., the higher grade being reported from greater depths, although, perhaps, from younger beds. It is to be remarked also that some of the shallow wells are the older and that their condition is now far from satisfactory, water having in many instances found its way into oil-bearing strata, with the consequent effects of oxygenation and the transmission of more or less impurities. The daily production of the wells is said to vary from two barrels in the oldest to 300 in the newest and deepest.

Among other groups of wells within what may be regarded as the confines of the Whittier field are the Chandler, a group of four wells one mile south-east of the Murphy and Central wells. These were about the first drilled in the Whittier field, but are now abandoned. Their location was probably determined by an oil seepage from the sandstone and conglomerate. They were, however, primitive in equipment and shallow and afforded but a light yield of heavy oil. At this point the Fernando formation lies in an anticline secondary and parallel to the main fold in the hills. The beds south of the axis dip from 45 degrees to 70 degrees, and those north of the axis, with steeper dip, apparently abut against the Puente fault, being in contact with the Puente shale forming the central and higher portion of the hills. This shale also pitches to the north immediately adjacent to the fracture, a position that may be either normal or overturned, the latter occurring at many places within the zone of severe crumpling along the southern face of the Puente Hills. The Chandler wells are located a little south of the axis of the secondary anticline referred to above.

One or two wells have also been drilled in the same general region as the Chandler group, but in the Puente shale north of the fracture. As in the case of other wells in this formation in the territory adjacent to the Whittier field, the results were negative. The fact, however, that the Puente shales or their included sandstone locally carry oil is evident from the field developed by the Puente Oil Co., but no law governing this relationship has been discovered. In case the oil is not originally contained in the formation, its presence is probably due to the proportion of sandy members – a factor widely variable from point to point.

At the summit of the Puente Hills, about one and a half miles north of Whittier, near the east edge of Sec. 16, T. 2 S., R. 11 W., the North Whittier Oil Co. has drilled two wells on the north limb of the main Puente anticline, within a mile or two of the west end of the fold. The wells are sunk in Fernando conglomerate and sandstone, which have a regular dip. They were not a marked success and no more have been drilled in the immediate vicinity, although at depths between 900 and 1,500 feet oil-bearing strata affording a small yield were encountered. These wells are of special interest, since they are among the first to be exploited in the younger formation on the north limb of the anticline. Faults of importance have not been observed in this locality.

(To be continued).

The American Oil Market.

New York, Week ended May 11th.

Reports from the oil fields during the last week have shewn comparatively little change in the general situation, but operations, on the whole, have been stimulated by the more favourable market conditions, as well as by the encouraging results accomplished last month. The developments in Illinois have attracted considerable interest, some good producers having been reported; wells yielding 200 barrels were not infrequent. A feature of the Pennsylvania fields was the strike of a gusher on the Samuel Hissam farm on Dry Run, Tyler county, that was credited with 600 barrels the second twenty-four hours after it had been drilled. This and the Haddox farm are said to be recording close to 2,000 barrels a day. Other results in Pennsylvania have not been of particular interest, light pumpers being the rule, especially in the lower south-west fields. Ohio developments have been unimportant, although momentary excitement was occasioned when a recently-drilled well in Springfield township shewed a flow of 30 barrels, prompting predictions that it would prove one of the best producers in the field. Reports from Tennessee indicate prospecting work in new territory, says the *Oil, Paint and Drug Reporter*, and the outlook is described as flattering. What is declared to be one of the heaviest drilling rigs ever constructed in Indian Territory has been installed at Olney, nine miles north-east of Wapahucka. A summary of April developments shews a general gain in activity, the most important results having been scored in the Illinois and Mid-Continent fields. Operations in the districts producing high-grade oils were disappointing, although the search has been pushed with the keenest vigour. In Pennsylvania the record of new wells for the month was 510, of which 150 were found to be dry. The pipe line runs for Pennsylvania, New York, West Virginia, Tennessee, Ohio and Indiana during April reached an aggregate of 4,429,482 barrels, or a daily average of 147,649 barrels. The deliveries for the month totalled 4,955,951 barrels, or a daily average of 165,198 barrels. The Mid-Continent runs, including Kansas and Indian and Oklahoma Territories, amounted to 3,098,915 barrels, or a daily average of 103,297 barrels. Runs and deliveries in the Mid-Continent fields are tabulated as follows:—

	Runs. Total barrels.		Deliveries. Total barrels.	
	1907.	1906.	1907.	1906.
January ..	2,337,165	1,472,214	1,646,091	539,088
February ..	2,292,117	1,352,531	1,759,152	527,994
March ..	2,795,969	1,693,182	1,965,586	719,320
April ..	3,098,915	—	2,166,236	—

Refined and Products.—A steady export movement in refined has prevailed during the week, and the improvement in the domestic demand for the products that is incident to the advance of the season has been noted. With the restricted production of high grade crude, there is difficulty in satisfying requirements for the products.

The price for barrelled oil for export remained firm, and the market is quoted at 8·20c. for New York loading, and 8·15c. for Philadelphia loading. The total engagements during the week in the local market amounted to over 186,125 barrels, against 265,000 barrels for the previous week. Freight rates remained firm at 2s. 1½d. @ 2s. 3d. hence to London, and 2s. 3d. @ 2s. 7½d. to Continental ports, as to port and vessel.

There has been a steady movement in cases for export, and the market has remained firm at $10·65 for plain tops at New York.

Naphthas have been in active request, and with supplies barely sufficient for the demand, a firm market has prevailed, but without change in quotations. Exports from New York for the week aggregated 28,500 gallons.

CLOSING QUOTATIONS.

Crude.	Week ended May 4. 1907.	Week ended May 11. 1907.
Pennsylvania crude in bbls.	$8·20	$8·20
Pennsylvania crude in bulk	4·75	4·75
Residuum, bbls. for export	6@6½	6@6½

Crude at the Wells.

The quotations for oil represented by credit balances were;—

	Week ended May 11. 1906.	Week ended May 11. 1907.
Tiona	1·74	1·78
Pennsylvania	1·64	1·78
North Lima	0·98	0·94
South Lima	0·93	0·89
Indiana	0·93	0·89
Canadian Oil:		
Petrolia	1·37	1·34

Refined—For Export.

		Week ended May 11. S.W.	Week ended May 11. W.W.
Barrels, cargo	per gal.	$8·20	@10 20
Philadelphia	.. ..	8·15	@10·15
Bulk, New York ..	.. ..	4·75	@ 6·75
Bulk, Philadelphia ..	.. ..	4·70	@ 6·70
Cases, New York ..	.. ..	10·65	@13·65
Cases, Philadelphia ..	.. ..	10·60	@13·60

Refined in Cases—110 Fire Test.

	Week ended May 4. 1907.	Week ended May 11. 1907.
3,000 to 10,000..	10·80	10·80
1,000 to 3,000..	10·85	10·85

Refined—Jobbing Lots.

In barrels, pkgs. included.

		Week ended May 4.	Week ended May 11.
120 fire test, S.W. ..	in barrels	12	12
130 fire test, S.W. ..	.. ..	12½	12½
150 fire test, W.W. ..	.. ..	13½	13½
In bulk from tanks	.. ..	10	10
300 fire test	.. ..	13¼@14	13¼@14

Naphtha and Gasolene.

	Week ended May 4.	Week ended May 11.
Naphtha, crude, car. lots, 68 @ 72 deg.	—	—
Gasolene, 86 deg...	24·00	24·00

Pennsylvanian Oil Runs from May 3rd to May 7th were:—May 3rd, 142,192; May 5th, 145,517; May 6th, 89,924; May 7th, 271,614. For the month of March, 2,911,685.

The Deliveries of Pennsylvania Oil for the same dates were:—139,212; 331,257; 160,944; 193,832; 199,011. For the month of March, 4,980,733.

Clearances for the Week.

During the week ended May 10th, and since Jan. 1 the clearances of petroleum, in gallons, from the port of New York, were as follows:—

	Week.	Year.	1906.
Refined	9,306,230	180,391,040	173,507,780
Crude	—	1,039,925	226,800
Naphtha	28,500	2,501,820	7,461,567
Residuum ..	—	307,087	—

Export Statistics.

The total exports from the port of New York and from the United States have been:—

	Gallons.
From New York, week ended May 10th ..	12,447,306
Total from New York, from Jan. 1st, 1907 ..	247,067,573
Same period last year	231,587,187
Increase	15,480,386
From United States, week ended May 10th ..	24,736,451
Total from United States, since Jan. 1, 1907	419,858,193
Same period last year	442,906,297
Decrease	23,048,104

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The "Review" Shipping List.

May 24, 1907.

(The following abbreviations are used in this table:—L. Left; P. Passed; Arr. Arrived; Sp. Spoken; Tr. Trading.)

Vessel.	From	For.	Latest Date and Position.
ALCHYMIST	Manchester	Lisbon	Arr. May 16
ALICE ISABELLE	La Rochelle	Philadelphia	L. May 8
ALEMBIC	—	—	At N. Sydney, April 30
AMERICAN	New York	Puerto Mexico	L. May 3
APPALACHEE	Hankow	San Francisco	Arr. Hong Kong, May 11
APSCHERON	Trieste	Ibrail	L. May 21
ARAL	Tyne	Philadelphia	P. Butt of Lewis, May 16
ARAS	Tyne	New York	Arr. Mar. 15
ARGYLL	—	—	Coasting U.S. (Pacific)
ASHTABULA	San Francisco	Shanghai	L. May 9
ASTRAKHAN	Hamburg	Philadelphia	In Tyne, May 18
ATLAS	—	—	Coasting U.S. (Pacific)
AUGUSTA	New York	Havana	L. May 13
AUGUST KORFF	Philadelphia	Hamburg	L. May 15
AUREOLE	Barry	Philadelphia	P. Barry Island, May 16
AZOV	—	—	Trading on W.C. of South Amca.
BAKU STANDARD	Rouen	Kustendje	P. Gibraltar, May 16
BALAKANI	Kustendje	—	At Malta, May 19 20
BATOUM	Tyne	Hong Kong	At Singapore, April 20
BAYONNE	Savona	Philadelphia	P. Gibraltar, May 18-19
BEACON LIGHT	Penarth	Novorossisk	P. Algiers, May 16
BEME	Rangoon	Bombay	L. May 13
BLOOMFIELD	Dublin	Philadelphia	P. Fastnet, May 12
BORJOM	Alexandria	Batoum	L. Constant'ple, May 6
BRILLIANT	Tyne	Philadelphia	Arr. May 15
BROADMAYNE	Manchester	Port Arthur (Texas)	Arr. May 17
BULLMOUTH	Shanghai	—	L. May 17
BULYSSES	Cardiff	Port Said	L. May 20
BURGERMEISTER PETERSEN	Tyne	—	P. Dunnet Head, May 12
CALCUTTA	Shanghai	San Francisco	Arr. May 12
CARDIUM	Cardiff	Singapore	P. Suez, May 17
CATANIA	Gaviota	Salina Cruz	L. Pt. Los Angeles April 25
CAUCASIAN	Cardiff	Kustendje	P. Barry Island, May 19
CHARLOIS	Rotterdam	New York	Arr. May 19
CHESAPEAKE	Calcutta	Singapore	Arr. April 28
CHESTER	Antwerp	New York	Arr. May 21
CIRCASIAN PRINCE	Callao	Buenos Ayres	Arr. April 21
CLAM	Balekpappan	—	L. Penang, May 10
COL. E. L. DRAKE	New York	San Francisco	L. May 5
COWRIE	Port Natal	—	L. May 4
CYMBELINE	Batoum	London	Arr. May 18
CZAR NICOLAI II.	Hamburg	Batoum	Arr. May 6
DAGHESTAN	St. Louis (Rhone)	Batoum	L. Constant'ple, May 20
DAKOTAH	San Francisco	Canton	L. April 24
DELAWARE	Kurrachee	Bombay	Arr. May 23
DEUTSCHLAND	Rotterdam	New York	L. May 14
DIAMANT	Philadelphia	Flushing	P. Del. Break., May 10
EDWARD DAWSON	Tonsberg	Swansea	Arr. May 14
ELAX	Philadelphia	Calcutta	P. Tarifa, May 17
ELSIE MARIE	New York	Hamburg	L. May 14
ENERGIE	Hamburg & Tyne	Philadelphia	Arr. May 17
ERIVAN	Batoum	Liverpool & Manchester	P. Constant'ple, May 20
ETELKA	Alicante	Serville	P. Gibraltar, May 17-18
EUPLECTELA	Tyne	Batoum	P. Dungeness, May 20
EXCELSIOR	Hamburg	New York	P. Dunnet Head, May 19
EZIO	—	—	Coasting Peru
FRANCE MARIE	Philadelphia	Marseilles	Sp. May 31, 41 N., 1 W.
GEESTEMUNDE	New York	Stettin	Arr. May 18
GENESSE	New Orleans	Philadelphia	Arr. May 4
GEORGIAN PRINCE	Norfolk (Va.)	Havana	P. Cape Henry, May 9
GOLDMOUTH	Balekpappan	—	P. Singapore, May 16
GUT HEIL	New York	Bremerhaven	P. Lizard, May 18
HAINAUT	Patras	Rotterdam	Arr. May 21
HARRY WADSWORTH	Port Arthur (Texas)	Antwerp	P. Cape Henry, May 7
HELOIS	Nordenham	Philadelphia	Arr. May 8
HERMIONE	Batoum	Manchester	P. Gibraltar, May 18
HOTHAM NEWTON	Middlesbro'	Batoum	P. Dover, May 9
HOUSATONIC	Tyne	Philadelphia	Arr. May 17
IMPERIAL	—	—	Tr. on Lakes btn, U.S.A. and Can.
JOANNIS COUTZIS	Batoum	Rouen	L. May 18
J. B. AUG. KESSLER	Batoum	—	At Singapore, about May 6
JAMES BRAND	Manchester	Philadelphia	L. May 21
JULES HENRI	Barcelona	Philadelphia	P. Gibraltar, May 2
KURA	Hull	Newport	Arr. May 22
LA CAMPINE	Antwerp	New York	Arr. May 15
LA FLANDRE	Ghent	Philadelphia	Arr. May 8
LA HESBAYE	Antwerp	Batoum	P. Dover, May 22
LA MADELEINE	Philippeville	—	P. Sagres, May 5
LA VIGUESA	Seville	Philadelphia	L. May 27
LACKAWANNA	Kustendje	—	P. Perim, May 22
LANSING	Astoria	San Francisco	Arr. Mar. 14
LE COQ	Philadelphia	Blaye	Arr. May 14
LOUTSCH	Dunkirk	London	L. May 12
LUCERNA	Philadelphia	Bergen	P. Reedy Island, April 30
LUCIFER	New York	Dublin and Belfast	Sunk April 16, 40° 18 N., 60 W.
LUCIGEN (Now Cuyalogo)	Liverpool	Philadelphia	P. O. Hd. Kinsale May 8
LUCILINE	Philadelphia	Dunkirk	Arr. May 19
LUMEN	Hull	Tyne	Arr. May 5
LUX	Cette	Novorossisk	L May 15
MANHATTAN	New York	Savona	L. May 10
MANNHEIM	Philadelphia	Hamburg	P. Del. Break, May 9
MARGARETHA	Kustendje	Tunis	P. Constant'ple, May 8
MAVERICK	San Francisco	Seattle	P. Tatoosh, May 7
METEOR	Batoum	Vladivostock	At Singapore, about May 16
MEXICAN PRINCE	Cienfuegos	Liverpool	P. O. Hd. Kinsale May 23
MIRA	Antwerp	Blyth	Arr. May 20
MUREX	Samboe	—	L. May 14
NARRAGANSETT	London	Tyne	Arr. May 22
NERITE	—	—	Tr. in China Seas
NEW YORK	New York	Southampton	Arr. May 19
OCEAN	Rotterdam	Batoum	P. Constant'ple, May 12
OILFIELD	Cette	Philadelphia	P. Gibraltar, May 18-19
ORANJE PRINCE	Tyne	Cuba	P. Prawle, May 10
ORIFLAMME	Rouen	New York	Arr. May 5
OSCEOLA	New Orleans	Genoa	Arr. Cette, May 17
OTTAWA	Havana	Philadelphia	Arr. May 5
OURAL	Antwerp	Batoum	P. Constanti'ple, May 20
PALEMBANG	Calcutta	Aroe Bay	L. April 15

Vessel.	From.	For.	Latest Date and Position.
PAULA	New York ..	Danzig	L. May 10
PECTAN	London and Emden	Galveston ..	Arr. May 12
PENNOIL..........	Tyne	Philadelphia	P. Nantucket, May 22
PERLAK	Madras	Aroe Bay ..	L. April 24
PHOEBUS	New York ..	Hamburg ..	Arr. May 13
PINNA	Tyne	Antwerp	Arr. April 29
POTOMAC	London & Tyne	New York ..	Arr. May 15
PROMETHEUS....	New York ..	Rotterdam..	Arr. May 21
PRUDENTIA	Rouen	Tyne	Arr. April 18
QUEVILLY........	Rouen......	Philadelphia	P. Lizard, May 11
RION..............	Newport	Constant'ple	L. May 17
ROCK LIGHT	New York ..	Sunderland	Arr. May 19
ROMANY..........	Palembang..	—	P. Gibraltar, May 20-21
ROSSIJA	Rotterdam..	Archangel ..	L. Tyne, May 21
ROTTERDAM	Amsterdam	New York ..	Arr. May 9
RUSSIAN PRINCE	New Orleans	Havana	P. Port Eads, May 6
SALAHADJI	—	—	Tr. Sts. Settlem'ts and Java Seas
SAN CRISTOBAL..	Liverpool ..	Port Arthur (Texas)	L. May 18
SAN IGNACIO DE LOYOLA	Vigo........	Philadelphia	P. Del. Break., May 13
SAXOLEINE	Point de Grave	Philadelphia	P. Dartmouth, May 18
SEMINOLE........	San Francisco	Hankow	P. Muroran, May 9
SINGU	—	—	Tr. in East Indies
SNOWFLAKE......	Cuba and London	Thameshaven	P. Gravesend, May 22
SOPHIE	Genoa......	Batoum	L. May 17
SPONDILUS	Thameshaven	Barrow	Arr. May 21
STANDARD	Stettin......	New York ..	In Tyne, May 22
STROMBUS	Palembang..	—	L. May 10
SURAM............	Blyth	New York ..	Arr. May 17
SUWANEE	Philadelphia	Plymouth and Hull	At Plymouth, May 21
SVIET	Alexandria..	Batoum	L. Constant'ple, April 30
TELENA	Batoum	Bombay	Arr. about May 22
TEREK............	Batoum	Southampton	P. Gibraltar, May 22
TIFLIS	Antwerp	Batoum	P. Gibraltar, May 22
TIOGA	Port Arthur (Texas)	Newport Nws. and London	L. May 6
TONAWANDA	San Francisco	Honololu ..	L. April 22
TROCAS	Balekpappan	—	L. Singapore, May 15
TURBO............	Hamburg ..	Batoum	P. Gibraltar, May 15
TUSCARORA......	San Francisco	Calcutta	Arr. April 21
TWINGONE	Rangoon ..	Madras and Cocanada	L. Mar. 9
VEDRA............	Malta	Batoum	L. Constant'ple, May 16
VILLE DE DIEPPE	—	—	In Port Havre, May 15
VOLUTE	Soesoe......	—	L. May 20
WASHINGTON....	Bengkalis ..	Nordenhamn	At Suez, May 20
WEEHAWKEN	London	Tyne	Arr. May 22
WILLKOMMEN....	Rotterdam ..	New York ..	P Dungeness, May 11
WINNEBAGO	Shanghai ..	San Francisco	Arr. May 2

LATEST MARKET INTELLIGENCE.

LONDON OIL MARKET.

Supplied by Messrs. Benjamin & Gee, 31, St. Mary Axe, E.C.

May 24th, 1907.

The price of refined petroleum remains unaltered as follows:—Russian and Roumanian, 6¼d.-6⅜d.; American, 6¾d.-6⅞d.; Water White, 7¾d.-7⅞d.

LUBRICATING OILS

are unchanged, the latest quotations being:—

American pale, £7 7s. 6d. to £11.
American dark cylinder, from £8 5s.
American filtered cylinder, from £11 2s. 6d.
Shellene, £5. No. 1 Russian, £10 7s. 6d.

TURPENTINE.

American Turpentine is firm, although quotations are slightly lower since our last report. For Spot it is now quoted 50s. 9d.; June, 45s.; July/December, 44s. 9d.

LIVERPOOL OIL MARKET.

May 23rd.

Refined oils are quiet, and sellers quote 6⅛d. for Russian, Galician or Roumanian; and 6⅝d. to 7⅝d. per gallon for American.

Petroleum Spirit continues at 1s. 0½d. to 1s. 3d. per gallon for American deodorised, according to quality on the spot.

LATEST AMERICAN PRICES.

New York, May 23rd.

Refined, in cases, is steady at 10·65; Standard White, 8·20; Credit balances, 1·78c.

Philadelphia, May 23rd.

Standard White is still quoted at 8·15.

RUSSIA.

Baku, May 20th.

The Baku oil market is firm. Light crude oil, spot, 28¾ copecs per pood; residuals, in ships, spot, 30½; kerosene, 34 copecs.

BELGIUM.

Antwerp, May 17th.

The petroleum market is unchanged. Price of Standard White, spot, 21¼ francs per 100 kilos.

FRANCE.

Paris, May 18th.

Illuminating oil is quoted in bulk, in whole tank waggons, 23 francs per hectolitre; spirit, 31·25 francs per hectolitre. Special white oil, 31 francs per hectolitre.

GERMANY.

Hamburg, May 17th.

The kerosene market is firm. The price of American Standard White is 6·80 marks per 50 kilos, Russian, 6·55 marks.

ROUMANIA.

May 14th.

	Francs.
Crude oil from different fields, including pipe line charges, per 100 kgs. ...	4·10-4·20
Refined oil, exclusive of taxes	10·00- —
Motor benzine, including taxes	23·00-24·00
Benzine, doubly refined	25·00-26·00
Residuals in tank waggons, at refinery ...	3·50-3·60
Paraffin	120·00-125·00

Prices for Export.

Refined oil in tank waggons, per 100 kgs.	7·50- —
Benzine, sp. gr. 0·710-0·715	24·00-25·00
,, sp. gr. 0·715-0·720	23·00-24·00
,, sp. gr. 0·730-0·740	16·00-17·00
,, sp. gr. 0·745-0·755	12·00-13·00

INDIA.

Bombay, May 4th.

The market is firm, and prices have slightly advanced from the figures published previously.

SITUATION WANTED.

MANAGER, TRAVELLER or SECRETARY

SITUATION WANTED by bright Italian young gentleman, in the Benzine and Oil Trade for nine years. Late Manager of works in Brussels. Excellent salesman. Has travelled for this branch in Belgium, Holland, France, Germany, Switzerland and Italy. Speaks and writes these languages. High-class references. **Would go to any country.** Apply, "Traveller," c/o Petroleum Review.

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IMPORTS of PETROLEUM into UNITED KINGDOM

Specially prepared for this Journal by the Custom House.

FOR THE WEEK ENDED 13TH MAY, 1907—

Date.	Port and Importers.	Description.	No. of Gals.	Port Whence.
May.	London—			
8	Mordaunt Bros.	Lub.	8,700	New York
8	American Express Co.	,,	80	,,
8	Fielder, Hickman and Co.	,,	19,120	,,
8	Scott's Wharf	,,	4,000	,,
8	A. Brown and Co.	,,	2,800	Philadel.
8	Schlieman's Oil Co.	,,	3,000	,,
8	J. Harrison	,,	190	Antwerp
9	Page, Son and East	,,	1,040	,,
9	Argo Steamship Co.	,,	360	Bremen
9	Anglo-American Oil Co.	,,	42,400	New York
9	G. W. Sheldon and Co.	,,	730	,,
10	London and India Dock Co.	,,	400	,,
10	Wilkins, Campbell and Co.	Lub.Gr.	200	,,
10	Ragosine and Co.	Lub.	4,850	Philadel.
10	J. Owen	Tar oil	2,100	Rotterdam
10	London and India Docks Co.	Lub.	4,640	Hamburg
11	T. H. Lee	,,	200	,,
11	Lub. and Fuel Oils, Ltd.	,,	4,920	Philadel.
13	Goudrand Freres	,,	4,800	,,
13	C. Price and Co.	,,	2,400	,,
13	Bowring Petroleum Co.	,,	7,800	,,
13	Anglo-American Oil Co.	,,	57,400	,,
13	,, (Weehawken)	Naphtha	1,044,640	New York
14	Asiatic Petroleum Co. (Spondilus)	Benzine	1,428,090	Balikpappan
14	Lubricating & Fuel Oils, Ld.	,,	10,250	Hamburg
14	Page, Son and East	Lub. Gr.	4,880	Antwerp
	Liverpool—			
7	George B. Taylor	Lub.	280	New York
7	American Line	,,	2,520	Philadel.
9	G. B. Taylor	,,	33,600	,,
9	Crew, Levick and Co.	,,	13,200	,,
9	Bowring Petroleum Co.	,,	1,050	,,
10	W. B. Dick and Co.	,,	11,580	,,
10	Meade-King, Robinson & Co.	,,	28,800	,,
10	Worthington and Boler	,,	6,200	,,
11	Vacuum Oil Co.	,,	36,520	New York
11	Geo. B. Taylor	,,	50,720	,,
11	W. B. Dick and Co.	,,	3,980	,,
11	W. Gibson and Sons	Lamp	2,050	Boston
11	Pickfords	L. Paste	1,000	Hamburg
	Barrow—			
7	Anglo-Bosphorus Oil Co.	Lub.	240	,,
	Bristol—			
7	Anglo-American Oil Co. (Bloomfield)	Lamp	899,050	New York
7	,, ,,	Gas	225,440	,,
9	W. Smith and Co.	Lub.	45,400	,,
9	,,	Lamp	800	,,
9	Ford and Canning	Lub.	1,000	,,
9	H. R. James and Sons	,,	8,800	New York
9	,,	M.Colza	2,000	,,
May.				
10	Anglo-Bosphorus Oil Co.	Lub.	1,000	Hamburg
10	Pickford's	,,	1,560	,,
	Cardiff—			
7	Guthrie, Heywood and Co.	,,	4,800	Baltimore
	Grimsby—			
9	J. Sutcliffe and Son	,,	1,840	Antwerp
	Hull—			
7	Wilsons and N.E. Railway Shipping Co.	,,	14,200	New York
7	W. Gilyott and Co.	,,	64,560	,,
9	Hull & Netherlands S.S. Co.	Tar Oil	2,220	Rotterdam
9	Wilsons and N.E. Railway Shipping Co.	Lub.	1,620	Hamburg
10	,, ,,	,,	5,000	Antwerp
	Manchester—			
9	Meade-King, Robertson & Co.	,,	5,960	Hamburg
9	Manchester Ship Canal Co.	,,	240	,,
11	Manchester Liners	,,	900	Philadel.
	Middlesbro'—			
9	E. Harris and Co.	,,	2,000	Antwerp
	Newcastle—			
7	Tyne-Tees Steamship Co.	,,	2,000	,,
9	,,	,,	1,160	,,
	Stockton—			
7	E. Harris and Co.	,,	480	,,
	Glasgow—			
10	Donaldson Bros.	,,	1,050	Baltimore
11	Anchor Line	,,	44,020	New York
11	,,	,,	69,040	,,
	Grangemouth—			
9	J. Currie and Co.	,,	1,000	Hamburg
	Leith—			
7	J. Currie and Co.	,,	7,000	,,
8	J. Cormack and Co.	,,	4,480	Riga
9	G. Gibson and Co.	,,	1,600	Antwerp
9	,,	,,	2,000	,,
9	W. Graham-Yooll and Co	Lamp	3,400	Hamburg
9	J. Currie and Co.	Lub.	280	,,
	Dublin—			
10	Anglo-American Oil Co. (Bloomfield)	Lamp	644,450	New York
	Total for Week		4,922,080	

FOR THE WEEK ENDED MAY 20TH, 1907—

Date.	Port and Importers.	Description.	No. of Gals.	Port Whence.
May.	London—			
14	Downing's American Despatch	Lub.	240	New York
14	London & India Docks Co.	,,	4,400	,,
14	Fielder, Hickman and Co.	,,	32,400	,,
14	Scott's Wharf	,,	6,000	,,

MIDLAND RY-CARRIAGE & WAGON CO., LTD., & Reduced.

Midland Works,

BIRMINGHAM.

—BUILDERS OF—

OIL AND OTHER

TANK WAGONS,

And Every Description of Rolling Stock

With WOOD or STEEL

UNDERFRAMES.

Anglo-American Oil Co., Ltd.,

SOLE IMPORTERS

Finest American Lamp Oils

WHITE ROSE ❦ ❦ ❦

. and .

❦ ROYAL DAYLIGHT.

Pratt's Motor Spirit

PACKED IN SEALED TWO GALLON CANS.

Universally used by all leading Motor Manufacturers, Motorists, Railway and Motor Bus Companies. ❦ ❦ ❦ ❦

IN USE AND FOR SALE EVERYWHERE.

QUALITY TELLS.

To Dealers only.

Date.	Port and Importer.	Descrip-tion.	No. of Galls.	Port Whence.
May.				
14	London and India Dock Co.	Lub.	400	New York
15	" ..	"	3,080	Hamburg
15	Anglo-American Oil Co. ..	"	53,600	New York
15	G. and H. Green	L.Comp.	3,660	"
16	G. Jennings	Lub.	7,200	Philadel.
16	Homelight Oil Co. .. .. (Cymbeline)	Lamp	1,086,280	Batoum
16	Burt, Boulton and Heywood	Naph.	5,280	Terneuzen
16	Page, Son and East ..	Lub.	640	Antwerp
17	Ocean Oil Co.	"	4,800	Philadel.
17	J. R. Grant	Gas	310	Brussels
18	Perkins and Homer ..	Lub.	4,000	Philadel.
18	Juett and Cain	"	4,000	"
18	Mordaunt Bros.	"	2,500	"
18	A. Brown and Co.	"	480	Hamburg
18	London and India Docks Co.	"	1,790	"
18	Homelight Oil Co. (Cymbeline)	Lamp	596,050	Batoum
18	Anglo-American Oil Co. (Narragansett)	"	2,584,430	New York
18	" "	Lub.	436,110	"
18	" (S.O.Co. of N.Y., No. 98)	Gas	1,659,240	Philadel.
18	" (Capt. A. F. Lucas)		1,164,880	"
	Liverpool—			
14	Meade-King, Robinson & Co.	Lub.	4,000	New York
15	"	"	4,000	"
15	Stockdale and Doel	"	4,760	Boston
15	W. H. Nott and Co. ..	L.Paste	260	Hamburg
16	E. Harrison and Co. ..	Lub.	36,000	Philadel.
16	Crew, Levick and Co. ..	"	10,950	"
16	"	M.Colza	5,090	"
16	Bowring Petroleum Co. ..	Lub.	810	"
16	W. B. Dick and Co. ..	"	14,440	"
17	Midland Railway Co. ..	"	930	"
	Hull—			
14	Wilsons and N.E. Railway Shipping Co.	"	800	Reval
14	" "	"	4,000	Antwerp
14	Hull & Neth. Steamship Co.	Tar oil	2,400	Rotterdam
14	W. Gilyott and Co.	Lub.	78,360	New York
14	Wilsons and N.E. Railway Shipping Co.	"	52,800	"
14	" "	"	11,040	Hamburg
	Manchester—			
14	J. T. Fletcher and Co. ..	"	360	Antwerp
14	D. Currie and Co.	"	2,000	Hamburg
16	Schofield and Co.	"	630	"
	Newcastle—			
16	Tyne-Tees S.S. Co. ..	"	3,680	Antwerp
	Swansea—			
16	Richards, Turpin and Co. ..	"	4,800	New York
	Glasgow—			
15	Anchor Line	"	2,400	New York
May	Grangemouth—			
14	J. Currie and Co.	Lub.	1,440	Hamburg
	Leith—			
14	Geo. Gibson and Co. ..	"	1,000	Antwerp
	Stornoway—			
14	C. F. Urlopen	Lamp	370	Tonsberg
	Belfast—			
14	J. C. Pinkerton and Co. ..	Lub.	150	Hamburg
14	British Petroleum Co. (Caucasian)	Lamp	1,242,000	New York
14	" "	Gas	494,000	"
	Total for Week		9,645,240	
	Total for the Fortnight		14,567,320	

ENGLISH PATENTS.

(Specially contributed by Messrs. EDWARD EVANS & Co., Consulting Engineers, Chartered Patent Agents, and Enrolled Patent Attorneys, of the United States, of 27, Chancery Lane, London, W.C.)

Applications Filed in Great Britain.

Improvements relating to Oils, Greases, Fats, Bituminous Substances and the like.—Charles Morris Faiga and James Webster, Queen Victoria Street, London. No. 8731 of 1907.

Method of Deodorising and Desulphurating Mineral Oils.—Gustaf Henrik Hellsing, 65, Chancery Lane, London. No. 9180 of 1907.

Improved Process or Treatment of Oils for the Removal of Smell or Odour therefrom, and rendering same Non-Inflammable.—Caesar Marter, 173, Fleet Street, London. No. 9563 of 1907.

New and Improved Method of Making Spirit for Motors and other Manufacturing Purposes.—Joseph Smith, Pelaw Grange Saw Mill, Chester-le-Street, Co. Durham. No. 9600 of 1907.

Improved Means for Extracting Palm Oil from the Chaff of Palm Nuts.—Samuel Charles Philips, 43, Southampton Buildings, London. No. 9733 of 1907.

Improvements relating to the Treatment of Oils.—Carl Dreymann, 7, Southampton Buildings, London. No. 9766 of 1907.

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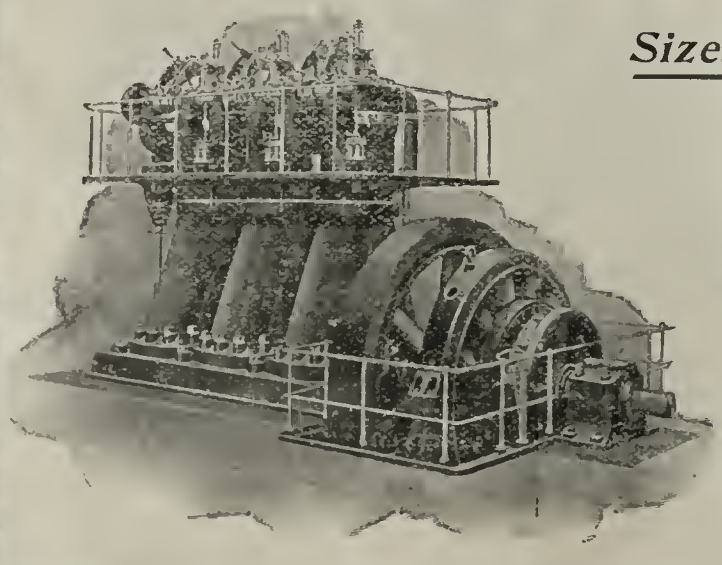

The Petroleum Review.

By PAUL DVORKOVITZ.

Vol. XVI. *(New Series.)* June 8th, 1907. No. 400.

Editorial Notes.

An Opening for English Enterprise.

Though the pages of the Review year in and year out are testimony of the remarkable advance which Roumania is making in regard to the development of her petroleum deposits, we doubt not that the Consular report published elsewhere in this issue will afford interesting and instructive reading, if only to corroborate the fact we have frequently emphasised as to the great opening there is in the oil fields of Roumania for the introduction of English capital. The English Consul in Bucarest appears to have been so particularly impressed with the insignificant part which English enterprise plays in the Roumanian oil industry of to-day that he has laid special stress upon this in his report, doubtless in the hope that England may realise the great opportunities which exist in those prolific petroliferous districts of Roumania, and remain no longer in the background. To us it certainly does appear strange that, though English capitalists boldly rush at highly speculative enterprises in the most distant parts of the world, they seem to have little or no desire to participate in the development of an industry—like the petroleum industry of Roumania—which, having passed the stage of sheer speculative investment, offers very substantial return to well-managed capital.

Scotch Shale Successes.

The Scotch shale oil industry is assuming amazingly profitable proportions, and we may take it that the operating companies have, during the past twelve months, collectively made net profits approximately £200,000. The year 1906 has proved to have been exceedingly favourable to the various concerns engaged in the industry, and even more favourable than the results recorded above indicate, for in order to place the respective companies in stronger financial positions the directors have, without exception, adopted the wise policy of allowing larger sums for depreciation and making provision for special expenditure. It says much for the profitable nature of the Scotch shale oil industry when year after year such eminently satisfactory results can be placed before the investing public, but it also says quite as much for the care and attention which the directors of the various companies devote to the interests of the general body of shareholders. We have seen how it is possible to bring down the most prosperous concerns to a state of almost impecunious insolvency by mismanagement consequent upon incompetence, and, inasmuch as in the latter case we condemn the gentlemen at the head of affairs not for their ignorance (for under certain circumstances this can be excused), but for their total disregard of all advice that aims at the betterment of the property in their charge, so now do we feel it our duty to publicly express the thanks which the whole of the petroleum industry owes to those gentlemen under whose guidance the Scotch shale oil industry is achieving such real progress. Would that dividends of 50 per cent. like that declared the other day by the Pumpherston Oil Co. fell a little more frequently across the track of the investor in oil enterprises.

Roumania's Coming Petroleum Congress.

Matters are being pushed rapidly forward with reference to the coming Roumanian Petroleum Congress which is to take place next September, and at this stage, it is assured that the international gathering will far outclass its predecessors in point of importance, while as regards the ultimate success achieved, this has already been assured. The arrangements are now assuming a concrete form, and the general programme which has been outlined in the Review previously is throughout to be adhered to. The Roumanian Government, with an eye to making the most of such an important conference, is taking the greatest possible interest in the arrangements, and the list of the members of the General Roumanian Committee which has been prepared by the Ministry of Domains shews to what a degree Governmental enthusiasm is running high in connection with this "gathering of the Clans." So far, we in England have unfortunately done nought to arouse wider interest in the Conference, but we have reason to believe that some spark of enthusiasm will kindle the fire of energy among those members of the English oil trade, who have already agreed to take an active interest in the Conference, when once they are called together. Arrangements are now on foot for the holding of a meeting in London, and we hope to be in a position to refer to this in our next issue. But whether England does herself credit or not by being directly interested in the Conference, it is, as we have already said, the universal undivided opinion that the coming Congress will achieve such international understandings for the benefit of the whole industry, that a pleasant surprise is in store, even for the most optimistic.

A Most Mendacious Message.

Just upon going to press we have received the report of the Commissioner of Corporations of the United States upon the petroleum industry, and, though nothing short of a careful perusal of the contents of the 400 pages will enable us to accurately judge the malice which from cover to cover is but very loosely veiled, we have gathered from a most cursory perusal sufficient to justify our stating that this apparently serious work is nothing short of one long defamatory libel upon the Standard Oil Co., into whose position the Commissioner of Corporations has enquired. Everything that can possibly be hurled at the Standard by its enemies is there accepted as gospel, and at the same time the elimination of everything which might be urged in favour of the Standard has been carried out with remarkable care. The fact that the Standard, owing to its foresight and superior wisdom, has achieved such success, and is to-day so great a factor in the petroleum industry of America, seems to strike the compiler of the report as being the result of a strategetic move conceived by some criminal fiend, and it is upon these lines that the report is drawn up. From what we have already seen of this publication it will long stand as an example of what a mind is capable of imagining as fact when once it has sunk to such depths of contemptible bias. In our next issue we shall again touch upon this most mendacious message.

THE BIBI-EYBAT PETROLEUM CO., LTD.

The annual report of the directors of the Bibi-Eybat Petroleum Co., Ltd., for the sixth financial year to be presented at the meeting to be held on Monday week, has just been issued. It shews that the company's total production for the past year has been 9,069,284 poods, the sales of the crude oil having realised 1,615,583 roubles. As a result of the year's trading there remained a total net profit in Russia of 100,787 roubles, out of which the English company has received 100,000 roubles, or £10,424 16s. 3d. From this sum, £6,875 has been absorbed in debenture interest, while the directors' fees, salaries, technical adviser's fee, etc., make up £2,906, the remaining £3,600 going to reduce the debit balance, which will now stand at £2,837 13s.

BATOUM PETROLEUM SHIPMENTS.

The following were the shipments of petroleum products from Batoum during the week ended May 5th, 1907, o.s. (in poods):—

	Illuminating Oil.		Other Products.	
	1906.	1907.	1906.	1907.
To Europe ..	22,000	—	415,000	160,000
To the East ..	61,000	68,000	18,000	1,000
To Russian Ports.	—	—	3,000	10,000
From 1st Jan. to 5th May:—				
To Europe ..	4,013,000	6,255,000	2,611,000	3,244,000
To the East ..	1,464,000	4,637,000	19,000	102,000
To Russian Ports	1,360,000	1,006,000	91,000	49,000

PRODUCTION OF ENGLISH COMPANIES IN RUSSIA.

Baku Russian Petroleum Co., Ltd.—The production for the week ended 26th May was 177,000 poods, or 2,853 tons; and for the week ended June 1st was 255,000 poods, or 4,111 tons.

Russian Petroleum and Liquid Fuel Co., Ltd.—The production for the week ended 26th May was 168,000 poods, or 2,709 tons; and for the week ended June 2nd was 168,000 poods, or 2,709 tons.

Spies Petroleum Co., Ltd.—The output for the week ended 26th May was 118,390 poods, or 1,909 tons; and for the week ended 2nd June, 151,900 poods, or 2,450 tons.

The European Petroleum Co., Ltd.—The production for the week ended 26th May was 139,814 poods, or 2,254 tons; and for the week ended 2nd June was 137,423 poods, or 2,215 tons.

RUSSIAN AND ROUMANIAN NOTES.

Rather Premature.—An expedition of engineers has left Perm for the Petchora district to investigate the routes by which the oil of those fields could be delivered to the Volga-Kama basin.

Storage Installations Change Hands. — The Eastern Transport Co. has leased its petroleum storage installation, at Warsaw, to Messrs. Nobel Bros., at an annual rental of 12,000 roubles.

Liquidation.—Messrs. G. M. Araffeloff and Co., a petroleum company operating at Baku, have now gone to liquidation. Messrs. G. S. Melik-Nubaroff, P. A. Bykoff, and H. G. Tumaeff have been appointed as liquidators.

The Aquila Franco-Romana Co.—The balance sheet of the Aquila Franco-Romana Co. shews that in the financial year 1906-7 the company has earned a gross profit of 464,597 francs, against 342,338 francs in the preceding year.

Distributing Re-organisation.—It is reported that Messrs. Mantascheff and Co. have ceased their independent activity as oil distributors in the interior of Russia, and handed over their installations at Czaritzin, Jaroslav, Saratoff, and Odessa.

The Romano-American Company's Success. — The Romano-American Co. are getting a large production from their well No. 6 at Moreni, sunk on the property leased from the Speranta Co. In course of five days this well produced 2,240 tons of oil.

Signs of Enterprise.—The Trajan Co., owners of the Cernavoda refinery, are now providing their refinery with plant to enable them to manufacture all grades of benzine, as well as all the valuable products which can be extracted from the residuals.

The Vega Refining Company is now building an installation for manufacturing lubricating oils, which will be attached to its refinery near Ploesti. The same company is now generally adapting its refinery for the manufacture of all the more valuable products of crude petroleum.

More Strikes.—A telegram from Baku, dated May 18th, announces that a strike is in progress on the properties of the Moscow-Caucasian Co. at Ramany, and of the Baku Russsian Petroleum Co., Ltd., at Bebe-Aibat. On the 18th, the men on the Mantascheff property at Bebe-Aibat also struck.

The Baku-Batoum Pipe Line continues to form the object of attacks by marauders, who steal considerable quantities of oil. On the 19th of April, the pipes were found to have been drilled through and taps fitted, through which oil was drawn off. This is the fifth case of thefts of oil from the pipe line during a comparatively short period.

Roumanian Oil in France.—The commercial treaty recently concluded between France and Roumania fixes the following duties on Roumanian oils imported into France:—Crude oil, 9 francs per 100 kilos., or 7·20 francs per hectolitre, exclusive of refining tax; refined oil and spirit, 10 francs per hectolitre; residuals and lubricating oils, 9 francs per 100 kilos. net.

Baku Stocks.—The stocks of vatious oils at the Baku refineries on the 1st of April, 1907, were:—Crude oil, 30,010,068 poods; illuminating oil, 11,552,298 poods; lubricating oils, 3,429,324 poods; residuals, 89,038,508 poods; other products, 1,007,515 poods; in all, 135,037,713 poods, against 114,774,535 poods on the 1st of March, an increase during the month by 21,000,000 poods, due to the shipping strike. The stock of crude oil at the oil fields on the 1st of April was 11,849,468 poods, an increase of 3,800,000 poods during the month.

Roumanian Production.—The full statistics of the production in Roumania for April not being yet available, the *Moniteur du Petrole Roumain* publishes the following figures of the output of some of the leading firms. During that month the Steaua Romana produced 31,784 tons, as against 36,033 tons in March. The production in April was distributed among the different properties as follows:—Bustenari, 18 791 tons; Campina, 11,057 tons; Baicoi, 662 tons; other fields, 1 274 tons. The production of some of the other large firms was:—Bustenari Co., 11,260 tons; Sylva Co., 4,135 tons; Colombia Co., 2,181 tons; Aquila Franco-Romana Co., 1,389 tons; International Co., 3,442 tons; and C. M. Pleyte, 4,795 tons.

The Third International Petroleum Congress.

The preparations for the holding of the third International Petroleum Congress in Bucarest next September are being pursued with great activity, and it can now be asserted with confidence that the Congress will be a complete success, and will be attended by numerous delegates and visitors from all over the world.

The following is a list of the General Roumanian Committee of the Congress, prepared by the Roumanian Ministry of Domains :—

Patron :—His Royal Highness Prince Ferdinand of Roumania.

Honorary President :—The Minister of Domains.

President :—Mr. A. Saligny, Engineer Inspector-General, President of the Roumanian Academy.

Vice-Presidents :—Messrs. V. I. Bratianu, Dr. L. Mrazec, Dr. L. Edeleanu, Mr. G. Spies, of the Steaua Romana Co. ; Mr. H. O. Schlawe, of the Bustenari Co. ; Mr. A. Raky of the Regatul Roman Co ; I. G. Cantacuzino, of the Petrolifera Co. ; and Mr. D. Dobrescu, of the Sperantza Co.

General Secretary :—Mr. C. Alimanestianu, Engineer-in-Chief.

Secretaries of Sections :—Dr. G. Murgoci, Mr. I. Tanasescu, and Mr. C. Osiceanu.

Honorary Members : —Mr. I. Kalinder, P. P. Carp, P. S. Aurelian, Ion Lahovary, Petri Poni, C. Istrati, B. Missir, C. I. Stoicescu and N. Filipescu.

Members : - At the Ministry of Domains :—The General Secretary and the Inspector-General ; At the Geological Institute :—Dr. S. Atanasiu, Dr. L. Teisseyre, Popovici-Hatzeg, R. Pascu, Engineer-in-Chief; At the Mining Department :—Mr. V. Puscariu ; At the Department of Industry :—N. Paianu ; Ministry of Public Works :—The Secretary General, the Directors of the Departments of State Railways, River Navigation, Maritime Service, Hydraulic Service ; At the Ministry of Finance :—The Secretary-General, Directors of Department of Direct Taxation, Department of Customs, Department of State Monopolies ; Other members are :—The Petroleum Association, Credit Petrolifer, International Co., Aurora Co., Vega Co., Trajan Co., Romano-American Co., Aquila Franco-Romana Co., Arnheemsche Petroleum Maatschappij, Colombia Co., Gallo-Romana Co., Ialomitza Co., Hollandsch-Rumeensche Maatschappij, Nederlandsch-Rumeensche Maatschappij, O. Jaumotte and Co., Matitza Co., Dambovitza Co., C. M. Pleyte, Italo-Roumanian Co., Oltenia Co., Seceleanu Bros., Grigorescu and Vladescu (Nafta Co.), G. Stefanescu and Co., A. Loewenbach and Co., Eberhard, Marchena and Co., Alpha Co., I. Grigorescu and N. Cesianu.

Dr. Lossen, Messrs. N. Cucu-Starostescu, Kertsch-Penescu, Ilie Solacoglu, C. R. Mircea, Muller, M. Cantacuzino, Paul Greceanu, L. L. Catargiu, Dr. Kiessling, Dr. Pfeiffer, R. G. Costinescu, Dr. Aisinman, Dr. Moeller, Dr. Poltzer, V. Iscu, V. Tacit, I. Ghica, V. Toroceanu, I. Gheorghiu, A. Dinopol, N. Poinaru-Iatan, E. Baum, Iaroslavici, Barbacioru, Riessdorfer, Metianu, Pantazi, Braescu, Balasinovici, Hoisescu, Kamner, and M. K. Ozinga.

The Roumanian Academy, the Rectors of the Universities of Bucarest and of Jassy, the Doyens of the Faculties of Science of Bucarest and Jassy, Professors G. Stefanescu and S. Stefanescu, of Bucarest University ; Professors Obreja and Simionescu, of the University of Jassy ; Dr. Zaharia and Dr. Longinescu.

The Director of the Superior Sanitary Service.

The Mayors of Bucarest, Ploesti, Campina, Constantza and Tergoviste.

The Prefects of the Districts of Ilfov, Prahova, Constantza and Dambovitza.

The Rural Credit Bank, the Administrations of Crown Domains, and the Civil Hospitals Trust.

Banks :—National Bank, General Bank, Marmarosch, Blank and Co., the Bank of Roumania, Ltd., Discount Bank, Banque du Credit Roumain, Commercial Bank.

Delegate for the Special Press :—Mr. N. Mancas.

The Roumanian Committee for the Petroleum Congress has addressed a circular to all firms connected with the petroleum industry throughout the world. In this circular the Committee announce that it has been decided to hold an exhibition in conjunction with the Petroleum Congress, the object of which will be to demonstrate the progress made by the petroleum industry. The objects to be exhibited are :—

All kinds of publications relating to petroleum, including works on geology, technology, chemistry, patents, maps, statistical reports, and tables, plans and sketches of instruments, installations, etc.

Samples of various crude petroleum oils found in all parts of the world, and samples of various products obtained from crude petroleum, with indication of their chemical and physical properties.

Various boring systems and tools, etc.

Materials for pipe lines and for the distribution of petroleum, wholesale and retail.

Materials and plans for tanks, tank waggons, tank steamers, barrels, cans, etc.

Models, plans, descriptions and photographs of refineries, steam boilers, stills for illuminating and lubricating oils.

Materials for removing the discoloration of oils.

Valves and fittings employed in the petroleum industry.

Benzine rectifying plant, paraffin plant, filtering plant, etc.

Apparatus for distributing, measuring and regulating of steam pressure.

Apparatus for analysing and investgating petroleum products.

Apparatus for the gasification of oils.

Installation and apparatus for lighting by oil gas.

Petroleum lamps, lamps for incandescent lighting.

Apparatus for burning petroleum as fuel, oil stoves, injectors, etc.

Apparatus, if not too large, can be sent in their natural size ; otherwise small models, plans, sketches, photographs, descriptions, etc.

All articles for the exhibition have to be sent to Bucarest, and addressed to the Bureau of the Exhibition of the Third International Petroleum Congress, at the Geological Institute of the Ministry of Agriculture, Industry, Commerce, and Domains, and are to arrive there not later than the 15th of August, new style.

THE TARBRAX OIL COMPANY, LIMITED.

The third annual general meeting of the shareholders of the Tarbrax Oil Co., Ltd., was held, on Wednesday week, in the Religious Institution Rooms, Glasgow.

Mr. William Fraser, chairman of the directors, presided, and, in moving the adoption of the report, said it shewed that after providing for the maintenance of the works and mines during the year, there was a balance at credit of profit and loss account of £10,873. From this there had to be deducted £1,115 for interest on loans, leaving a net profit of £9,757 19s. 11d. The directors recommend that this profit should be disposed off by writing off £1,034 of preliminary expenses and paying the preference dividends at the rate of 6 per cent. per annum up to 30th April last, which would require £5,181. This left a balance of £3,542 to be carried to the current year. He was sorry, he said, the profits did not permit a dividend for the ordinary shareholders, but they would observe that the whole of the arrears were being paid up on the preference shares, and this meant fully two years' dividend. At the last annual meeting he told them that the directors had decided to put down a third bench of retorts, which it was expected would be completed in about six months' time In point of fact, it had taken nearly tweve months to complete the extensions and find a sufficient supply of shale to fully employ the retorts, and it was really only during the last month of the financial year that the whole of the retorts were got to work. At the commencement of the year the shale output was not equal to the requirements of the two benches of retorts. This deficit in output had to be overtaken, and then development for the third bench had to be made. This took longer than was anticipated, and it had only been accomplished within the last two months. He was glad to say, however, that they had now a sufficient supply of shale to meet all their requirements, and at present they were putting 100 tons per day to stock. The new mine, referred to in last report, had turned out well, and was now yielding an output of 300 tons per day. As they would see from the report, a new pit had been sunk to the same shale as was being worked by the mine, and that would greatly strengthen the company's position as regarded regular supplies and cost of production. The works were now complete in all details, and all the retorts and other plant were fully employed, and giving satisfactory results. The position, therefore, was that the company had commenced this year with the works fully employed, and with an ample supply of shale to meet all requirements. Under these conditions the directors confidently expected satisfactory results from this year's working.

Mr. John Paterson seconded, and the report and recommendations were approved of.

On the motion of Mr. R. D. Munro, seconded by Mr. J. D. McJanet, Messrs. Archibald Fraser and John Paterson were re-elected directors, and on the motion of Mr. J. Muir, seconded by Dr. R. Brown, Mr. William McLintock was reappointed auditor.

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THE PUMPHERSTON OIL COMPANY, LTD.

The annual general meeting of the shareholders of the Pumpherston Oil Co., Ltd., was held, on Wednesday of last week, in Glasgow, Mr. John Paterson (the chairman) presiding.

The Chairman, in moving the adoption of the report which appeared in the last issue of the Review, said that the profits for the past year were about £23,000 more than for the previous year, and the directors were, consequently in a position to recommend the payment of a dividend on the ordinary capital of 50 per cent., or 20 per cent. more than for the previous year. Continuing, the Chairman said that all the debentures had now been redeemed, and the working capital of the company was being provided by the reserve fund, amounting to £8,000. Now that the debenture bonds had been cleared out of the way and the properties held in security reconveyed to the company, there was no obligation as to fire insurance, and the directors proposed that the company should now become its own insurer. It was with that object in view that the directors recommended the creation of a fire insurance fund, and the setting aside of £5,000 out of last year's earnings. The directors would add to this sum from time to time. Five years ago the liabilities of the company (exclusive of share capital) exceeded the floating assets by over £23,000; but to-day the assets (exclusive of cost of the company's works and properties) exceeded liabilities by £144,000, which meant that for the period referred to the company's financial position had been improved to the extent of £167,000, while during the same period the dividends to ordinary shareholders (including the present one) amounted to 160 per cent.

Mr. William Fraser seconded the motion, and the report and accounts were adopted.

CLASSIFIED IMPORTS INTO UNITED KINGDOM UP TO JUNE 3rd, 1907.

IN GALLONS.

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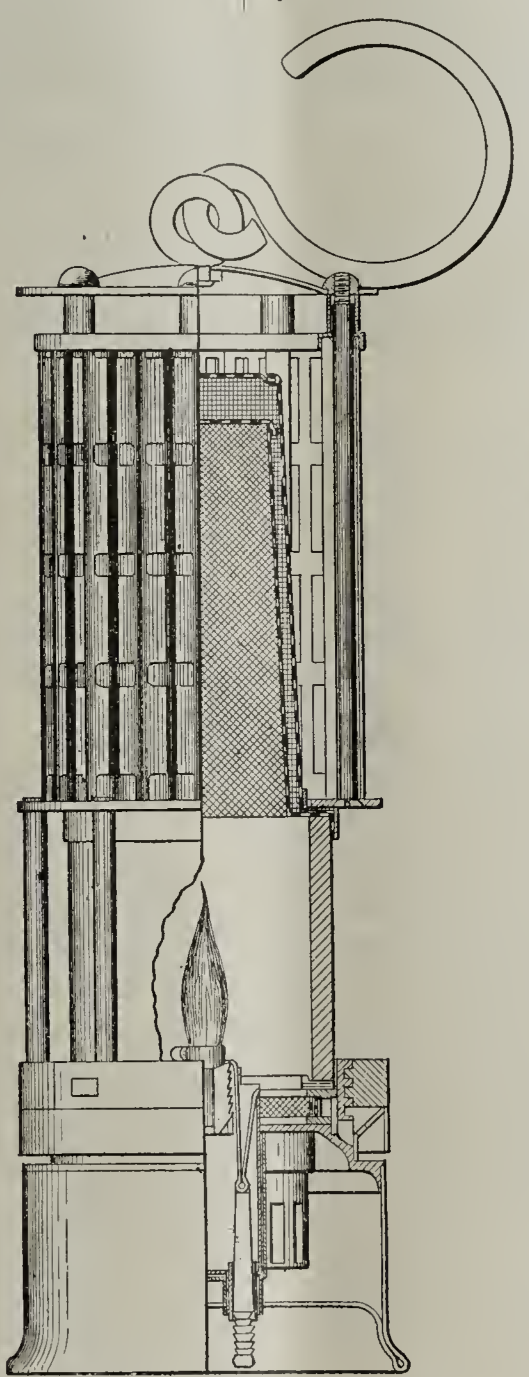
Country.	Illuminating.		Lubricating.		Residuals.		Gas Oil. (Solar)		Benzine.		Fuel Oil.		Other Descriptions.		Totals.	
	Since May 20.	From Jan. 1.	Since May 20.	From Jan. 1.	Since May 20.	From Jan 1.	Since May 20.	From Jan 1.	Since May 20.	From Jan. 1.	Since May 20.	From Jan. 1.	Since May 20.	From Jan. 1.	Since May 20.	From Jan. 1.
Austria ...	—	—	5 800	67,440	—	67,770	—	—	—	—	—	—	—	—	5,800	135,210
Belgium ...	—	153,410	28,500	253,090	—	—	—	310	4,000	4,000	—	—	—	590	32,500	411,400
Canada ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dutch India.	—	—	—	—	—	—	—	—	1,860,800	9,843,910	—	—	—	—	1,860,800	9,843,910
Germany ...	6,790	1,138,020	50,550	652,730	—	2,000	—	—	—	80	—	—	900	3,100	58,240	1,795,930
Holland ...	100	1,020	—	4,710	—	—	—	—	38,000	284,530	—	—	4,800	58,530	42,900	348,790
Roumania ...	477,360	4,138,170	—	—	—	—	868,790	2,832,790	—	1,459,000	—	238,700	—	—	1,346,150	8,668,660
Russia ...	2,359,400	14,971,740	16,480	2,103,430	—	—	—	—	4,850	7,250	—	—	240	360	2,380,970	17,082,780
U.S.A. ...	3,340,640	39,148,120	931,880	16,335,340	—	448,690	2,467,590	23,207,320	—	2,420,420	666,460	1,998,460	159,080	810,950	7,565,630	84,369,300
Other Countries	—	950	120	16,870	—	—	—	—	—	2,500	—	40	—	840	120	21,200
	6,184,290	59,551,430	1,033,330	19,433,610	—	518,460	3,336,380	26,040,420	1,907,650	14,021,690	666,460	2,237,200	165,020	874,370	13,293,130	122,677,180

THE WOLF SAFETY LAMP.

From a perusal of a report of the Select Committee on accidents in Scottish mines, it will be found that the many advantages which have won for the Wolf Safety Lamp so wide a use are tersely dealt with.

The oil vessel in the lamp is made of one piece of steel pressed cold, and when finished it is doubly tinned, previous to which the top cover containing the wick, igniter and filling apparatus is fixed, and the vessel filled with specially prepared cotton-wool (⅝ ounce, which has a maximum absorption of 30 drams). The wick is brought to the bottom of the vessel, and is so regulated by the wick adjuster that it is impossible to obtain a smoky flame. It is necessary, before this can be attained to burn a lamp, when first it is used, for a few minutes, and then the lamp attendant will determine how much wick should be left above the wick tube, so as to afford the maximum light without smoking.



The friction igniter consists of a metal box fitted with a scratcher and a hinged door, to the outside of which is attached a thumb spring for fixing it into position. The pull bar, to which a scraper is connected, is placed (after the igniting strip is fitted into position) so that the scratcher and scraper come together, causing an ignition of the cap on the strip, and thus the wick is lighted.

To fill the oil vessel, so that only sufficient benzine is absorbed by the cotton-wool and that no liquid be left unabsorbed in the vessel, an automatic filling apparatus has been introduced; it is fitted with one or more taps, as may be found necessary. A glass reservoir is placed above the tap, with a capacity of 2 oz. (slightly more than the maximum absorption of the cotton-wool), and at the top a brass tube is inserted, extending on the outside to near the top of the tank; it is then bent and brought downward to the mouth of the tap. As soon as the cotton-wool has absorbed sufficient benzine, air rushes up the tube and prevents any further flow; and, consequently, should an oil vessel, containing, say, 9 drams, be put under the tap, only 21 drams more will be added before charging is automatically stopped. The top of the tank is provided with a safety-valve and inner cylinder, covered with wire-gauze (784 meshes per square inch) which allows any excess of air and vapour to escape. The larger apparatus, fitted with two or more taps, is placed on a cast-iron stand, and is additionally provided with a glass gauge, a wing-pump, and circular stands, carrying the oil vessels, and these are, by a lever and counterbalance weight, brought up to the required height for filling. The wing pump is attached by a pipe ½ inch in diameter to the storage vessel placed adjacent to the lamp room, so that the attendant never needs to handle the liquid. The capacity of the tanks varies from 9 to 19 gallons.

To insure the safe locking of the lamp the oil vessel is provided with two threads, with a maximum thickness of ⅛ inch, in which three apertures are cut; into these the anchor head of the magnetic lock successively falls, when the parts of the lamp are fitted together, three distinct clicks being heard.

The standard brass ring contains the magnetic lock, which is dust-proof. The air-inlet ring is fitted with double wire gauze, and for fixing the same firmly against the glass cylinder it is provided with two small projections, which are forced by circular key through small slots in the standard ring, upon which they ride and are turned back to the check placed upon this ring. Perpetual washers are used for all joints, and they have been found to be more durable than asbestos.

Inside the top ring supporting the bonnet a series of strong steel springs is fixed; they hold the glass firmly in position and are of such a tension that they take up the little expansion of the glass that takes place while the lamp is in use. The bonnet is made of seamless steel, pressed cold, and is treated in a similar manner to the oil vessel. Both the inner and outer gauzes are fitted with fixed copper rings, which insures that their normal shape will be maintained while being cleaned. The inner gauze is 4 inches high, 1¾ inches in diameter at the base, and 1⅝ inches in diameter at the top. The outer gauze is 4¼ inches high, 2¼ inches in diameter at the base, and 1½ inches in diameter at the top. It will thus be seen that there is a space of ¼ inch between the tops of the inner and outer gauzes and ample clearance at the sides; and, as the five standards or poles are only brought up to and fastened to the bonnet ring, an air space is thus provided, keeping the lamp cool.

It is essential that a safety lamp possess the attribute of safety under the known conditions met with in mines. The Wolf lamp will withstand a velocity of 47 feet per second in an explosive current; the usual velosity in a main intake is approximately 12 to 15 feet per second and round the face, say, 5 to 8 feet per second.

The Wolf safety lamp, it is pointed out, is capable of detecting as low as ⅝ per cent. of fire-damp. It is fitted with a flat wick ⅝ inch. wide, and gives a light equal to 1·43 c.p., and fitted with a round wick, it produces a light of 1·02 c.p. The time of burning this lamp is 16 hours when fitted with a flat wick and 20 hours when fitted with a round one.

DOES PETROLEUM EXIST IN SOUTH AFRICA?

A writer in the *South African Mines*, comments at length upon the petroleum producing possibilities of South Africa. He says that last year, in addition to the frequent bulletins from the Inhambane fields and reports of new discoveries of oil indications in various parts of the Orange River. Colony, there were rumours from authentic sources that the vast área in the Carnarvon and Van Wyk's Vlei district of the Karroo were to be thoroughly investigated in depth. There were the promising oil shales of the Western Province, too, which were held by the Coronation Syndicate, and which, it was announced, were to provide the basis of a vast industry.

It seems unfortunate, he says, that after so much activity in this particular direction, the question of the existence of payable oil strata in this country is still a matter of a mere conjecture, and that no results of a definite kind can be said to have been obtained. The existence of some oil shale in the Pongola region of Northern Natal has been repeatedly proved; and it is reported that the nhambane people have not yet given up hope of finding something valuable, but that a difficulty in the way of inadequate machinery has checked their progress.

Apart from such insignificant exploratory work as is being carried on in the Orange River Colony, the only prospect which appears to be conducted on a practical and useful scale at the present moment is in the vicinity of Hopetoun.

It is unfortunate that some really determined effort has not been made upon a sufficiently practical scale to determine whether after all there is not some valuable supply in depth to which the numerous and widespread indications may be traced. They extend over thousands of square miles of high veldt from the western boundary of the Karroo plateau to the eastern limits of the Orange River Colony, with a wide extension in a north and south direction across this territory. The character of the indications is more or less the same throughout, and is mainly confined to the dolerite dykes themselves or to the shaly strata in their immediate neighbourhood.

In the dykes the oily compounds, all the paraffin class, are found in cavities and fissures of the rock, which has usually an oily appearance throughout. The oil shales, when found, are generally very rich in similar compounds. It is important to note that analysis has referred all these compounds to the paraffin series.

A good deal of superficial prospecting has been done by means of boreholes, and even shafts, upon these rocks, but the invariable story has been that insufficient working capital, combined with a very inadequate knowledge of the conditions associated with payable oil occurrences in other parts of the world, has within a short period put an end to the venture without any really useful information being obtained.

Various theories have been put forward to account for the presence of oily compounds under the conditions quoted. One very natural opinion is that the dykes have penetrated the deeper lying rocks in which oil may have been deposited after the decay and alteration of mineral remains; for instance, the Bokveld beds, which are so prominent in the Ceres and Mossel Bay districts, and in which dense deposits of marine organisms are found. This theory would reasonably account for the occurrence of oil in the dykes themselves and the neighbouring shales.

Another suggestion is that the dykes, at the time of their eruption, distilled oil from the coaly seams, which they traversed in the Karroo measures; but an objection has been raised against this view on the ground that the compounds actually found in the dykes are not such as would have resulted from an action of that kind.

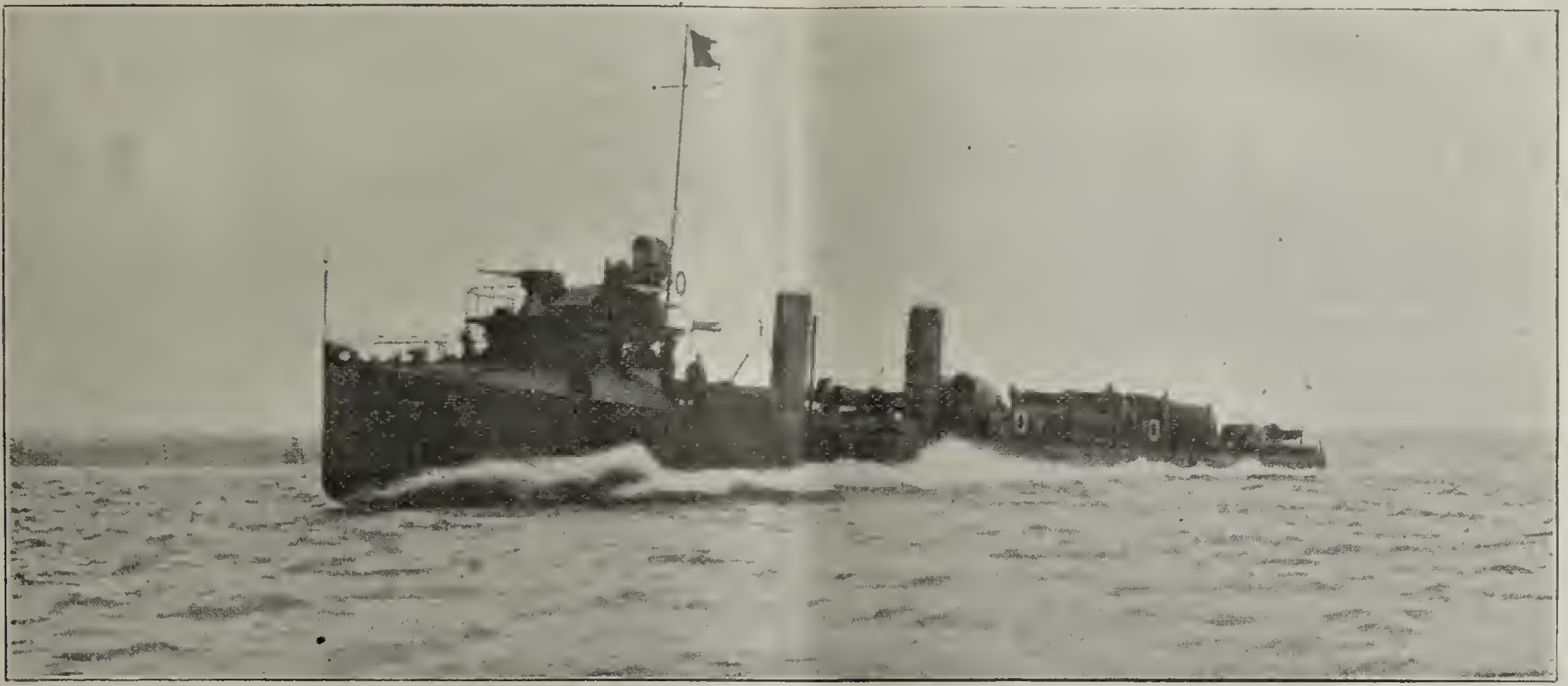
The oil-bearing measures in the Inhambane region do not appear to be more than local deposits of recent age, which have no relation to any deep-seated or very extensive reservoirs, although it is quite possible that they may hold oil in fairly large and payable quantities. Quite another kind of indication is found in the Ceres and Mossel Bay districts before alluded to. Here, where enormous stretches of highly fossiliferous rocks are located, it is reported that gas in considerable volume is poured out at several points from the earth. Some years ago the Ceres area was reported on, but, here again, although the prospects are said to be encouraging enough, no important attempt has yet been made to investigate the matter. As far as general conditions go, Ceres and Mossel Bay have a greater similarity to other oil-producing regions of the world than is to be noted in any other part of South Africa, and since the difficulties which are in the way of prospecting enterprise are apparently much fewer in the former localities, it seems strange that advantage has not more largely been taken of the fact.

PETROLEUM DEVELOPMENTS IN THE DUTCH EAST INDIES.

The thirty-fifth annual issue of the *Jaarbock van het Mijnwesen*, gives official statistics concerning the petroleum industry in the Dutch Indies during the past year. It shews that at the end of June last, there were 26 petroleum concessions in force in Java and Madoera. The principal companies are the Koniklijke Nederlandsche Co., with 14 concessions, which obtained 561,347,000 litres of raw petroleum; the Dordtsche Petroleum Co., with 17 concessions, yielded 127,803,000 litres; the Netherlands Indies Industrial and Commercial Co. produced 486,924,000 litres; the Sumatra Palembang Co., 41,891,000 litres; the Boeloe-Telang concession of the Exploring Co., 132,875,000 litres; the Java Petroleum Co. at Klantoeng Sodjomerto, 646,000, and the Moes Ilir Petroleum Co., 13,680,000 litres. The refinery at Semarang yielded 41,085,847 litres illuminating oil, 1,000,000 litres gasolene, and 428,000 kilos. paraffin. At the Wonokromo refinery 50,229,716 litres were dealt with. In Atjeh, the Concession Peureula, Paja Bilik, and Peudawa yielded 262,771,895 litres raw oil, which was pumped to the Pangkalan-Brandan refinery. At the Concession Moeare in Koetei favourable results have been obtained, and 43,761,508 kilos. were shipped by tank steamers to the refinery at Pangkalan-Brandan. The refinery at Balik Pappan has been considerably extended. The results obtained, on the whole, from both old and new wells have been most satisfactory.

OIL FUEL TURBINE-DRIVEN TORPEDO BOATS FOR THE BRITISH NAVY.

We herewith publish an illustration of one of the 26-knot oil-fired torpedo boats recently built by Messrs. J. Samuel White and Co., Ltd., of East Cowes, I.O.W., for the British Navy. These oil-fired torpedoes represent a new series of boats, of which 24 have been laid down since the first were ordered under the naval programme of 1905-6. Up to that time the torpedo boats had ranged in speed up to 25 knots, but later it was considered that a superior type of boat was necessary for even the tactical work undertaken by purely torpedo craft, in contradistinction to the over-sea offensive work of the destroyers. At the same time the committee appointed to investigate the advantages of oil fuel had solved the difficulties of the system, not only as regards the best means of vapourising the fuel, but also of consuming it, and the new boats have therefore been designed with boilers for the use of oil fuel only. The details relating to the installation for the burning of oil fuel are kept secret by the naval officials and also the builders; but following precedent, it is very likely that in a few weeks we shall read in some Continental technical a full description of the same.



PETROLEUM IMPORTS INTO THE UNITED KINGDOM DURING MAY.

THE SHIPMENTS INTO VARIOUS PORTS.

In the following table we give the various shipments of petroleum products into the ports of the United Kingdom during the month of May. The total quantities imported amounted to 28,699,880 gallons, this figure representing the greatest amount imported during any one month of the present year. The imports for January were 28,000,000 gallons; February, 22,200,000 gallons; March, 17,002,320 gallons; and April, 24,900,690 gallons. The importation of gas oil was particularly large during the month :—

	Lubricating.	Illuminating.	Residuals.	Benzine.	Other Products	Fuel.	Gas.
Aberdeen	80	—	—	—	—	—	—
Barrow	240	—	—	1,162,480	—	—	—
Belfast	680	1,239,810	—	—	—	—	505,220
Bristol	103,750	899,850	—	—	3,000	—	225,440
Cardiff	4,800	945,000	—	—	—	—	—
Cork	160	—	—	—	—	—	—
Dublin	—	644,450	—	—	—	—	—
Folkestone	240	—	—	—	—	—	—
Glasgow	319,360	12,000	—	—	7,500	—	—
Goole	160	—	—	—	—	—	—
Grangemouth	24,440	3,200	—	—	800	—	—
Grimsby	2,400	—	—	—	—	—	—
Hull	455,460	2,093,350	—	4,000	9,420	—	241,630
Leith	71,010	8,070	—	—	—	—	—
Lerwick	—	120	—	—	—	—	—
Liverpool	633,040	4,100	—	—	17,260	—	963,360
London	1,000,790	4,758,460	—	3,215,180	14,200	—	4,991,680
Manchester	390,820	—	—	—	2,000	—	1,262,500
Middlesboro'	2,000	—	—	—	—	—	—
Newcastle	9,000	—	—	—	—	—	—
Plymouth	—	287,740	—	—	143,730	—	—
Southampton	1,600	952,000	—	4,850	—	—	—
Stockton	480	—	—	—	—	—	—
Stornaway	—	370	—	—	—	—	—
Sunderland	—	1,051,800	—	—	—	—	—
Swansea	4,800	—	—	—	—	—	—
Totals	3,025,310	12,900,320	—	4,386,510	197,910	—	8,189,830

ANOTHER TANK STEAMER DESTROYED.

WRECK OF THE "SOPHIE."

The world's fleet of oil tankers still continues to suffer losses, the latest to be recorded being that of the "Sophie," which took place a few days ago. The "Sophie" was engaged at the time upon a journey from Batoum to some of the Mediterranean ports, and caught fire on May 31st near the entrance to the Bosphorus. She was carrying a cargo of about 2,300 tons of kerosene, and though the crew were saved, the whole of the cargo was lost, the vessel also being totally destroyed. The "Sophie" was built in the Newcastle yards in 1888, and thus belonged to the earlier class of tankers. Her length was 235 feet, breadth 33·2 feet, and her depth 23 feet, the gross tonnage being 1,671.

NATURAL GAS IN QUEENSLAND.

Writing to us on the above subject, the London correspondent of the *North Queensland Herald* points out that in the process of developing Australia, enterprise has been rather slack in the direction of the discovery and exploitation of oil fields. Owing to the indications in Queensland being very promising, an expert from Canada has been inspecting the Rosewood district near Brisbane, and an excellent start was made in striking a good flow of natural gas in an artesian well which had been sunk. In 24 hours 30,000 cubic feet of gas were emitted. It is now expected that a flow of petroleum will be shortly struck. The gas was discovered at a depth of 120 feet, and the find is within 10 miles of valuable iron deposits, limestone and glass sands, and only four miles from the railway.

IMPORTS OF PETROLEUM PRODUCTS INTO GERMANY.

STATISTICS FOR THE FIRST THREE MONTHS OF 1907.

The following quantities of petroleum products were imported into Germany during the first three months of 1907:—

	Tons.
Illuminating Oil	342,346
Lubricating Oils	61,553
Crude and Refined Benzine	30,350
Crude Oil	5,511
Other Oils	1,915
Total	441,675

The quantities imported from the different producing countries were as under:—

	Tons.
U.S.A.	321,016
Russia	44,038
Austria-Hungary	34,076
Dutch-India	20,448
Roumania	12,023
Other Countries	10,074
Total	441,675

During the same period there were exported from Germany:—2,321 tons of lubricating oil and 2,639 tons of other products; in all, 4,960 tons.

THE PETCHORA OIL FIELDS.

On May 17th an inter-departmental conference took place at St. Petersburg to consider the question of assisting the development of the oil fields in the Petchora district of North Russia. After an exchange of views the conference decided that the carrying out of the measures recommended by Mr. Bieloborodoff, who was commissioned to investigate those fields (such as the laying of a pipe line, etc.), must, for the present at least, be considered as premature. Notwithstanding the many facts indicating the possibility of the existence in the Petchora of petroleum deposits capable of industrial development, this has not yet been proved definitely. All the prospecting work so far done in the Petchora district was carried out only to very slight depths. The only practical working borehole laid down last year by Mr. Gansberg after passing at a depth of 210 feet through the first oil stratum, which did not prove of any commercial value, has so far reached a depth of only 320 or 330 feet.

The discussions which took place at the conference have made it clear that the main obstacle in the way of carrying out prospecting work in the Petchora district is the difficulty of delivering tools and machinery to the Uchta basin, where the oil deposits are situated. For transport in the winter there are no proper roads, and transport in the summer by the rivers is greatly impeded by the existence of rocks in the river beds, of which two near the villages of Vislensky and Porezhny practically bar the entrance into the Uchta.

Prince Mestchersky, who was present at the conference, formulated the wishes of the parties interested in the Petchora oil fields in the following manner:—They are urgently in need of a good map, if not of the whole region, at least of its river systems; they also ask for a good road from the basin of the river Vym to the basin of the Uchta, a distance of 120 to 160 versts. In regard to a map it was ascertained that there is already a map prepared by the Department of Forests covering the largest part of the desired road. In regard to a road, it was decided that prior to ascertaining its cost and route, which, as is expected, will be done by the Zemstvo of Vologda, it is premature to take any steps with a view to its construction. It was further announced that some further topographical works will be carried out by the Department of Forests in those parts of the province of Vologda which may be traversed by the proposed road.

Mr. A. K. Vasilieff, mining engineer, stated that the preparation of a map of the Uchta oil fields, which are situated in two provinces—those of Archangel and Vologda—is made difficult by the fact that the standards of magnetic deviation is different for these two provinces, and it is therefore difficult to join together the surveys taken in the two provinces.

In view of the general interest lately evinced in the Uchta petroleum fields, the Governor of the province of Vologda is about to undertake a visit to those fields, which visit is expected to stimulate the work of opening up the district.

RUSSIAN PETROLEUM AND LIQUID FUEL COMPANY, LIMITED.

ANNUAL MEETING OF SHAREHOLDERS—ANOTHER PLAUSIBLE STORY TOLD.

The Hon. Evelyn Hubbard presided at the tenth ordinary general meeting of the shareholders of the Russian Petroleum and Liquid Fuel Co., held last week at Winchester House, E.C.

In moving the adoption of the report and accounts, a *resumé* of which appeared in the last issue of the Review, the Chairman said he much regretted that it should fall to his lot to lay before the shareholders a report which, for the first time, shewed an actual loss on the company's operations in Baku, and placed it in a position of considerable anxiety. The anticipations of improvement expressed in the directors' last report had been entirely frustrated by the course of events, as was indicated to the shareholders in the circular issued last December. What, he took, it the shareholders desired to hear from him, and what he would endeavour to tell as clearly as possible, was, first, why their calculations proved at fault; and, secondly, why, in view of the enhanced value of oils at Baku, they had failed to make a profit even on reduced production.

The answer to the first question was summed up in the utter disorganisation of labour in Baku. When last year they were preparing for the consolidation of their floating liabilities by the issue of second debentures, the board went most carefully, with the assistance of a committee, into the position and prospects of the company. The weekly returns up to that date and the whole tenor of the advices from the local management indicated a production for the year of 15,600,000 poods, or a net production of 13,000,000 poods.

Thirteen millions net of crude oil, at the prices then indicated of 25 copecs, would have realised a sum sufficient to cover all estimated outgoings, plus interest on loans and redemption of debentures, leaving a balance of over £100,000 for depreciation and margin of profit. They actually maintained a production of 300,000 poods per week for the month of April, and continued in the neighbourhood of that figure until the second week of June, when, with the recrudescence of labour troubles, the output began to decline, and had fallen by the middle of July to 170,000 poods, when the general strike broke out and stopped work altogether for nine weeks. On the resumption of work they found that there was more water than oil in their wells. Nevertheless, the local management succeeded in working the output up again from 143,000 poods for the second week in September to close on the 300,000 poods towards the close of the year, 307,700 poods being the record for the second week of December. That work was accomplished in the face of continued difficulty and conflict with the workmen, who had got thoroughly under the influence of socialist agitators, and were perpetually presenting fresh and impossible demands. In the result their total gross production amounted to some 11,280,000 poods, instead of the 15,600,000 which, as the above figures shewed, they would undoubtedly have attained under normal conditions of work. The difference between those figures, taken at 25 copecs per pood, meant a shortage, as against the estimates, of no less than £110,000; but that was far from being the total loss inflicted on them by the local conditions in Baku.

They were under contract to deliver to the distributing combine formed by Messrs. Nobels and the Mazout Co. quantities of mazout and kerosene based on the figures of their former production, and in order to fulfil their obligations they were forced into the market, at a time of extreme scarcity, to buy the balances required. In a normal year such purchases would have shewn a profit. As it was, they were obliged to buy crude oil, mazout, and kerosene to the extent of about 7,750,000 poods, on which the prices returned to them by the combine shewed a difference of some 3¼ copecks round, or over 250,000 roubles. The prices realised for mazout in the interior were, in the main, satisfactory, but those for kerosene, on the contrary, proved very disappointing. The combine's sales in the early part of the year promised a return of at least 35 copecs at Baku; but subsequently, under what they believed was an undue fear of competition, prices were dropped to an extent which entirely destroyed those prospects, and shewed a return to their company of hardly over 20 copecs, which was the figure at which the stock was valued in the accounts. The return, then, to sum up, on oils sold represented in all a shortage of some £65,000, as against their estimate, and with the addition of an excess expenditure over estimate of £15,000 at the oil wells, caused by the general rise in cost of labour and materials at Baku, they had together with the initial shortage of £110,000 in production, a less value of £190,000 accounted for.

With reference to the second question, why the company could not make profits even on a reduced production, it was very true that prices in Baku were ruling very high; but profits depended not on the actual value of a production, but upon the margin obtainable between producing and selling. In the early days of their company they obtained immense quantities of oil from spouters, or from wells at shallow depths, involving a minimum cost in production. They worked cheaply, and they were very well repaid. As their wells began to grow deeper and fountains began to fall off their charges rose, until, when face to face with a great depression of prices in Baku, there was no longer any margin at all. Under those conditions, and after much deliberation, they determined to endeavour to secure the profits due to the refiner and distributor in the interior of Russia, instead of remaining as mere producers. As they all knew, those prospects had been disappointing, and, so far, no adequate return had been secured for the expenditure involved, which was represented by the issue of their first debentures.

So long, however, as their production was maintained, that policy could be fully justified, especially when, after a short but sufficient experience of the severity of the internal competition, they were able to enter into an arrangement whereby their most powerful competitors, Messrs. Nobels and the Mazout Co., admitted them as partners, instead of as opponents, into their own distributing organisation. That arrangement was an essential one for the company if they were to continue in the business at all, and over a course of years he believed it would amply demonstrate its value to the company. Of course he was perfectly ready to admit that, could they have foreseen the future, they would not have taken the risk or incurred the expense involved in those developments.

Their production for the four years 1901-4 averaged over 30,000,000 poods annually, and so long as that production was maintained the company was able to shew a return on its capital after providing for depreciation and the first debenture service—though nothing equal to the first three phenomenal years of its existence, when over 120,000,000 poods were produced within 34 months. The production had now fallen to less than 10,000,000 poods net, and it was hardly necessary to point out that, assuming a charge for current expenditure and depreciation together of £180,000 per annum, they started on their former figures—that was 30,000,000—with a cost per pood of 6 copecs, as against one of 18 copecs per pood at the present moment. Add for refinery and incidental charges, discounts, and taxes, say, £25,000, plus the £45,000 which represented debenture service and London charges, and they had another £70,000, which, while it raised the total cost per pood of 30,000,000 to only a little over 8 copecs, actually amounted to 25 copecs on the reduced output of 10,000,000 poods, and wiped out any margin of profit, even at that high price, at the present rate of production.

As regarded the losses inflicted on the company during the last two years, which the board estimated at not less than the equivalent of £350,000, arising directly from the disorders and strikes and labour agitation generally in Baku, it was about as reasonable to lay them to the charge of the management as it would be to make the English boards of many South African mining companies responsible for the losses that they had sustained through the war and the strike movement threatening to paralyse business on the Rand. Then it might be objected that certain Russian oil companies were still making profits. Undoubtedly that was so. On a small capital a local company, with no charge for debt, could shew satisfactory returns even on a small production; but he would remind the shareholders that the strike movement had been directed mainly against the foreign companies, and the native companies had methods of standing in with the strikers which were perfectly well understood in Baku, but which they had not desired to imitate.

In conclusion, he feared he could not say anything very definite as to their future prospects, except, perhaps, that he believed they have touched their lowest watermark as regards production. Hope for the future had to lie in the two factors of economy in expenses and increase of production. They were doing, and would continue to do, their best in the former direction, but they could not expect much success until the Government took a more vigorous grasp than they have yet done of the labour question. At present, with an output of under 200,000 poods per week, they were not making both ends meet. The deficiency, after allowing for the present inefficiency of labour, was largely owing to the stoppage of well 62, which started so vigorously, and gave such good hopes of the deep levels last year. For any real improvement in their position they had to look to the lower strata, and in order to be able to provide the shareholders with the best opinion obtainable as to these sources they had asked Mr. Golubiatnikof, the well-known Government geologist, to visit the property again and draw up a joint report, with the co-operation of Mr. Dournieff, the wells manager.

He then moved the adoption of the report and balance-sheet.

Mr. A. J. H. Smith was then called upon to second the resolution, and, in doing so, gave the impressions he had formed of a recent visit to the company's properties at Baku.

Mr. A. C. Holzapfel, in criticising the remarks of the chairman, said that gentleman had anticipated him by admitting that most of the losses of the company were due to the marketing arrangements which were made five years ago. The speaker wished to point out that at that time the then managing director—Mr. Tweedy—protested against the marketing arrangements with the Mazout Co. and Nobels, and had the company only done what Mr. Tweedy suggested, the shareholders would have been receiving dividends to-day. The speaker concluded by proposing an amendment providing for the appointment of a committee of three independent shareholders to inquire into the past and present management of the company. He thought it would be in the interests of all that an inquiry should take place, as so much had been written and said about the company.

The Chairman said he was unable to accept the amendment, as notice thereof had not been given.

Mr. Tweedy said that two years ago, at the annual meeting, the chairman explained that the falling off in the production from 550,000 poods per week to 420,000 poods was because of defective water shut-off, adding that the matter had received great attention, and the system was only just being perfected, too great reliance having been placed on screw casing. The production at present was about 149,000 poods per week, which did not say much for the perfect system of water shut-off of the new management. He had received a letter from Baku, dated the 14th of the present month, stating that in the boring of wells for Nobels and others thick screw casing was being used for water shut-off, with very good results. In view of this he could only suggest that the chairman had been grossly misled in giving the shareholders such information. The shareholders, in their innocence, had allowed their interest to be sacrificed to the extent of £1,200,000 in three years.

Mr. Scobell said, in reference to the "B" debenture issue, he considered it a very extravagant way of raising money, and whereas the syndicate obtained their debentures at 75 per cent., they were issued to the shareholders at 83½ per cent.

After other discussion, the report of the directors and the balance-sheet was passed, and the re-election of the retiring directors concluded the meeting.

BAKU PRODUCTION DURING THE FIRST HALF OF MAY.

The production of crude oil at the Baku oil fields during the first half of May, 1907, amounted to 17,957,596 poods, of which 4,853,854 poods were obtained at Bebe-Aibat. Spouters have yielded: at Bebe-Aibat 12,800 poods, and at Balakhany 135,000 poods.

EXPORTS OF PETROLEUM PRODUCTS FROM ROUMANIA IN APRIL.

The following are the figures of the exports of petroleum products from Roumania during April:—

Destination.	Crude, Gas oil, distillate, etc. Tons.	Illuminating oil. Tons.	Benzine. Tons.	Total. Tons.
France	587	4,226	5,034	9,847
India	—	9,629	—	9,629
England	—	5,203	—	5,203
Germany	172	—	3,466	3,638
Italy	23	2,022	31	2,076
Tunis	21	1,944	51	2,016
Turkey	205	1,617	2	1,824
Austria-Hungary ..	1,419	—	46	1,465
Other Countries ..	267	—	—	267
Total	2,694	24,641	8,630	35,965

THE PETROLEUM DEPOSITS OF KANSAS.

AN EXHAUSTIVE SURVEY.

In view of the necessity which exists for some authentic data concerning the extensive petroleum deposits in Kansas, an exhaustive monograph upon the deposits in the Independence quadrangle has recently been prepared by Mr. Schrader and Mr. E. Haworth, of the U.S. Geological Survey. Among other things, the author points out that the Independence quadrangle is a rectangular area of about 950 square miles, situated in South-eastern Kansas, adjacent to Indian Territory, its eastern limit being about forty-seven miles west of the Kansas-Missouri line. It forms an important part of the well known Kansas-Indian Territory oil and gas fields, which have an area of nearly 11,000 square miles, extending from Paola, in Eastern Kansas, south-westward, a distance of 200 miles to Muskogee, Ind. Ter., and Cleveland, Okla. The quadrangle is bounded by meridians 95 30 min. and 96 degrees west longitude and parallels 37 degrees 30 min. north latitude. It includes Montgomery county, the southern third of Wilson county, and portions of other counties adjoining these two on the east and west. The chief towns are Independence, Coffeyville, Cherryvale, Neodesha, Caney and Elk. The growth of these towns has been greatly stimulated during the last few years by the finding of oil and gas.

The occurrence of oil was known from surface seepage in territorial days, prior to 1860. The earliest exploitations were begun in what is now Miami county, about 100 miles north-east of Independence. Here oil was first discovered in the spring of 1855, on Wea Creek, east of Paola, where it dripped from fissures in the rocks, and formed an oil surface on the streams. Shallow wells, some yielding traces of oil, were soon drilled in this locality and at others near by, where there were further indications of oil. As these wells were limited to 100 or 200 feet in depth by the shortness of the boring apparatus, plans were made to sink deeper wells during the following season. This project was interrupted by the breaking out of the Civil War, but during the next three or four years numerous similar wells were drilled to depths of a few hundred feet, yielding traces of oil. In 1865 the St. Louis, or Ernstein, Co. is reported to have bored two wells about ten miles east of Paola, in each of which a small quantity of oil was found. There are other wells of commercial importance in this part of the field—one drilled within the city limits of Wyandotte during the early seventies, and the Ascers well, drilled in Iola in 1873. In the latter part of the eighties a number of wells that produced a few barrels of oil daily were drilled along the State boundary line east of Paola, and about 1890 Mr. Mills, of Pennsylvania, now proprietor of the gas plants at Osawatomie and Paola, prospected around Osawatomie and Neodesha, finding the indications so good that he induced Messrs. Guffey and Gayley to enter the field. Drilling was extended with fair results from Osawatomie and Paola westward to Thayer, Neodesha, Cherryvale, and Coffeyville, the three last named places being in the Independence quadrangle.

The development at Neodesha must be credited to Messrs. Guffey and Gayley, who began operations here early in 1893. They soon found oil in the immediate vicinity of Neodesha, whence they prospected extensively over wide areas throughout almost all of Eastern Kansas. They drilled as far north-east as Pleasanton and Mound City and as far west as the western part of Chautauqua county—singularly enough with poor success. They plugged and abandoned almost all the wells they drilled outside the environs of Neodesha. Recent developments shew that in many instances they drilled almost on the very borders of productive oil pools, from which others have since reaped rich rewards. The also did considerable "wildcatting" over almost all of Indian Territory, and to a certain extent were the pioneers in what afterward became profitable developments at Bartersville, Chelsea, Muskogee, Tulsa and Red Fork. In 1895 they sold their entire Kansas holdings to the Forest Oil Co. Later the Kansas branch of the Forest Oil Co. was reorganised, and obtained a Kansas charter, under the name of the Prairie Oil and Gas Co., with headquarters at Neodesha.

During the last half of 1903 and the first half of 1904 many new companies were formed, and much development work was done. Success followed, principally in Fall River and Verdigris River valleys. Within the immediate proximity of Neodesha almost every well is productive.

Montgomery county, embracing approximately the southern three-fourths of the Independence quadrangle, did not produce much oil until the last half of 1903. Early in July of that year drilling was begun with success on the now famous Banks land, about a mile north-east of Bolton.

Bolton Pool.—The Bolton pool is about five miles south-west of Independence, between Walker Mound and Bolton, on the Atchison, Topeka and Santa Fe Railway. Almost its entire area—almost three and a-half miles—is productive of oil. The largest wells of the State are located here. The depth of the first drilled in this pool was 1,180 feet, the thickness of its oil sand 15 feet, and its production 40 barrels per day. Soon the south-east quarter of section 17 became the site of a number of wells, each with an initial production exceeding 500 barrels per day. The Standard Oil Co. completed its pipe line from Neodesha to the Bolton field early in September, 1903. From this time until the middle of 1904 this area was more prominent and popular than any other within the entire State. Derricks were built with surprising rapidity, and wells were drilled as speedily as possible, the greater number of those first drilled being remarkably productive.

Wayside Pool.—During 1904 prospecting was extended south-westward from Bolton, and at a distance of from five to six miles, between Wayside and Havana, another very productive oil area, known as the Wayside pool, was found.

Tyro Pool.—In the winter of 1903-4 a good oil well was drilled close by the railroad track, about 200 yards east of the station of Tyro, on the Missouri-Pacific Railway; and during the year 1904 a number of wells were drilled in that vicinity, and also to the south and south-east. Probably the best well thus far drilled in this field is immediately south of Tyro, within 100 feet of the southern boundary line of the State. Free flowing, it filled a 200-barrel tank each day during the first week of its existence, and is still an excellent producer. During the summer of 1904, also, a good pool was developed in section 16, about four miles south-east of Tyro.

Caney Pool.—In the south-western part of the quadrangle, a few miles east of Caney, is the Caney pool. The wells are situated principally along the Missouri-Pacific Railway, about midway between Caney and Tyro, but there are also some wells south of this area.

Coffeyville Area.—Oil has been discovered in considerable quantities both south-east and north-east of Coffeyville and to some extent within the town limits. During the summer of 1903, the Atlas Oil and Gas Co. drilled for oil south-east of Coffeyville, found at a depth of 350 feet a shallow oil sand which, within a limited area, was fairly productive. The Springfield Co., also in drilling north-east of town in the angle between Verdigris River and Missouri, Kansas and Texas Railway, just outside the town limits, found a fair producing shallow oil sand.

Drum Creek Pool.—About three miles south-east of Independence, a small but promising area, commonly known as the Drum Creek pool, was developed during 1904. It is situated on both sides of Verdigris River, principally on the east side.

Cherryvale Area.—This area embraces the country around Cherryvale, and in the middle-eastern part of the quadrangle. Oil has been obtained in fair quantities on the uplands, one to two miles north-east of town, and during the summer of 1904 it was found, also from two to three miles to the south and south-east.

Salt Creek Pool.—This is a small but good oil pool which has been developed upon Salt Creek, about four miles south-east of Neodesha, just within the borders of Montgomery county, east of Verdigris River, and about two miles west of the St. Louis and San Francisco Railway.

Neodesha Area.—Neodesha has long been known as a centre of production of oil in the Kansas field. The Standard Oil Co.'s refinery and tanks are located here. The oil is found principally in the immediate vicinity of the town.

Sycamore Crane Area.—This area consists of a belt about two miles in length, lying near the centre of the quadrangle, north-west of Independence, and extending from Sycamore south-westward *via* Larimer to Crane and Table Mound at Elk River. It lies between and nearly in line with the Neodesha and Bolton pools, with which future work may connect it. It has produced some oil wells, but none of great size.

North-Western Part of Quadrangle.—Drilling around Elk and near Lafontaine has resulted in oil wells of small production at each place; but prospecting in the north-east quarter of the quadrangle has not been very satisfactory, in part because of the increased labour and expense in drilling, due to the greater depth of the oil-bearing sands.

Occurrence of the Oil.

Though small bodies of the oil are frequently found at depths of a few hundred feet below the surface, the larger deposits occur at greater depths in and near the Cherokee formation. At Coffeyville, where the strata overlying the Cherokee are thinner than at any other point in the quadrangle, three oil sands are encountered at depths of 350, 600, and 900 feet respectively. The best wells, yielding oil of 32° B. gravity, derive their oil from the middle or 600-foot sand. A well in the S.E. $\frac{1}{4}$ Sec. 17, in the Bolton pool, encountered two strata of oil sand – one 15 feet thick and very rich in oil, at a depth of 1,056 feet, and the other 30 feet thick at a depth of 1,156 feet. During the first flow of oil from these sands the well is reported to have produced 1,000 barrels a day.

In the Independence region the productive zone ranges in depth from 450 to 600 feet; at Cherryvale from 700 to 800 feet; at Neodesha, from 800 to 900 feet; at Bolton and Caney, from 1,000 to 1,200 feet; and at Wayside, midway between Bolton and Caney, two oil sands occur at depths of 700 to 800 feet and 1,350 to 1,450 feet. The sands encountered between 1,350 and 1,450 feet probably correspond roughly to those of the Tyro pool, where most of the oil is struck at about 1,300 feet. This is also approximately the depth at which the oil is reached in the Bartlesville district, Indian Territory.

Character and Value of the Oil.

Like all Kansas oils, the oil of the Independence quadrangle has an asphaltum base. It is dark brown or black in colour and heavy, but varies greatly in specific gravity from place to place, sometimes within narrow geographic limits. That derived from shale, as in the petroleum fields of California, is generally lighter than that derived from sandstone and conglomerate.

It is found that by the evaporation of its lighter volatile oil standing in an open tank decreases in gravity at an average of 5 degrees a week for the first few weeks, thus losing in value about 10 cents per barrel per week. A test made with oil fresh from the pump shewed a loss of more than 7·3 degrees in three months. The evaporation is much greater in dry or warm than in wet or cold weather.

This loss probably accounts for the fact that the oil in many instances tests below the expectations of the producer, who nearly everywhere uses open tanks, usually of wood, without a protecting cover. The Standard Oil Co. avoids this great loss, as far as possible, by making its tanks practically air tight and by closing them immediately after they are filled.

(To be continued).

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Saturday, June 8th, 1907.

THE RUSSIAN PETROLEUM COMPANY'S SAD PLIGHT.

THE large body of shareholders who listened the other day to the plausible tale told by the Hon. Evelyn Hubbard of the many misfortunes which have strewn the path of the Russian Petroleum and Liquid Fuel Co., Ltd., must have been forced to the conclusion that empty eloquence can go but a very short distance to create confidence in the future when the experiences of the past have been so disappointing.

For the first time in its truly remarkable history, the company has utterly failed to make both ends meet, and this during a period when prices have been phenomenally high and the production of oil by no means low. Baku, like the whole of Russia, we know, has been passing through times of stress and strife, when in every branch of commerce matters have had an abnormal aspect, and the ordinary business life of the Empire more or less in a state of transition. These are facts well known to the man in the street, and we mention them, inasmuch as they have to be reckoned with. That this unrestful condition of things, however, has come as a godsend to some, we do not for a moment doubt, and it occurs to us that the task of the Hon. Evelyn Hubbard at the Russian Petroleum and Liquid Fuel Co.'s meeting would have been far more difficult had it not been that he was able to reiterate the difficulties created by the labour troubles, and thus throw, as it were, dust in the eyes of the discontented shareholders.

There are some things which cannot be explained away, and it forcibly strikes us that however explicit any explanation may be, it is bound to fall short of giving anything like consolation to those investors who years ago became financially interested in the Russian Petroleum and Liquid Fuel Co. Our readers are well aware of our opinions as to the company's present management, and, without unduly labouring the point, we would say it is clear that unless there is an entire re-organisation carried out upon drastic lines, the present plight of the company renders any look into the future dismal in the extreme. Those who have intelligently followed the course of events which have brought the company to its present ignominious position must be convinced upon this point. The guiding hand has been at fault, and in his speech the company's chairman has practically admitted this. There has been one long list of blunders with the inevitable result that to-day the affairs of the company are in a chaotic state, and everyone is wondering what is to happen next. Nor does the speech of the Hon. E. Hubbard offer any solution of the difficulty.

There was a time in the affairs of the company when the future was looked forward to with feelings of hopeful confidence, but long and continuous periods of failure have so blackened the outlook that now even the directors prefer to close their eyes to what is in store. But not so with the ordinary shareholder. His is a totally different position, and he seriously asks himself "Has the future any hope?" The company has tied itself to arrangements which at their best cannot be profitable, and no matter from what standpoint we look at the Nobel-Mazout contract, we see in it the result of indiscreet action taught by inexperience. Then by reason of the attitude of those responsible on the property to the oil-field operators, the company has indeed a very bad name to live down, and the entire absence of a conciliatory front to the small army of workers on the properties, has created an impression which does not augur well for future peaceful development.

A return of those profitable periods of the past is, of course, a thing which is ardently desired by all who have the slightest interest not only in this company, but in the Russian petroleum industry as a whole Taken all round, the past year has by no means been so disastrous to the majority of the operating companies as the Hon. Evelyn Hubbard would have the shareholders believe—in fact, many of the companies look upon 1906 as a most profitable year, for though consequent upon the strikes and general unrest, production somewhat decreased, the prices for oil soared skyward to an extent undreamt of.

The question then is, how can a return of dividend-earning times be brought about? This, as in the case of the other Anglo-Russian companies, so with the Russian Petroleum and Liquid Fuel Co. rests absolutely in the hands of those in charge of the company's affairs. Three or four years ago we all know that the shares and debentures of the various English companies operating at Baku stood at over £11,000,000 sterling, while to-day, though the value of crude oil has increased threefold, depreciation has brought the collective share value down to below £5,000,000. In the face of these simple facts, is it possible for one moment for either the Hon. Evelyn Hubbard or any of his colleagues to justify their position by any eloquent explanation? We most emphatically say, No.

A drastic change must take place, and that quickly. To court enquiry, as we are told the directors of the Russian Petroleum Co. do, is a diplomatic way of beating about the bush. There has been too much of this in the past: let there been none in the future. The shareholders have a right—a perfect right—to say that the old order must give place to a new. In the first place, there must be effective management at the fields themselves, such as is not the case to-day, while a clean broom should sweep the directorate from top to bottom, supplanting those who are responsible for the present miserable plight, by men of wide oil-field experience who know what has to be done, and how this can best be accomplished.

In some quarters we see that a scheme of amalgamation among the whole of the Anglo-Russian oil companies is hinted at—presumably a case of the blind leading the blind. Under certain circumstances we admit an amalgamation might possibly be brought about, the effect of which would be mutually advantageous, but for the present we fail to see the benefit which would accrue from the tying together of several concerns all more or less—or rather more than less—reeking with rottenness.

Argue as one may, the only feasible plan of campaign is to commence afresh by launching upon a sound policy, initiated and carried through by men of practical experience. Now is the time for the new broom to start its important work, but it *must* sweep clean.

LONDON OIL SHARE MARKET.

Friday, June 7th, 1907.

The period which has elapsed since our last issue has been one of great depression on the London Stock Exchange, and the Oil Share Section has proved no exception to the general rule of shrinkage in value.

From the figures published in our last issue the first alteration took place on the following Tuesday, when Russian Ordinary lost 1s. per share at 5s. to 6s., and the Preference 6d. at 6s. 6d. to 7s. 6d. The six per cent. Debenture Stock falling 5 next day to 55-60.

With Thursday's dealings Schibaieff Preference and Spies were both a better price at $1\frac{3}{4}$-$2\frac{1}{4}$ and $\frac{3}{8}$-$\frac{7}{16}$ respectively. But on Friday the market was very weak—Baku Ordinary being quoted 3d. lower at 2s. 9d. to 3s. 3d., Russian Ordinary 6d. at 4s. 6d. to 5s. 6d., Preference 1s. at 5s. 6d. to 6s. 6d., and Shell Transport Ordinary a similar amount at 46s. 6d. to 47s. 6d.

Saturday and Monday both proved quiet days but on Tuesday Shell Ordinary lost another 1s. at 45s. 6d. to 46s. 6d., and the Preference $\frac{1}{8}$ at $9\frac{3}{4}$-10, while Baku Preference were 6d. easier at 5s. to 6s. A further shrinkage was recorded on Wednesday in Shell Transport Ordinary, which closed no better than 44s. to 45s., thus registering a decline of 1s. 6d. on the day, and the only other alteration since to report is the recovery of Baku Ordinary to 3s., thus regaining the 3d. per share previously lost.

At the End-May Settlement which commenced on Tuesday, May 28th, the account to be adjusted proved to be of the lightest, and no difficulty was experienced in the continuation of shares, the rate ruling for Oil Shares being moderate at about 5 per cent. to 7 per cent. A comparison of "making-up" prices with those fixed at the mid-month carry over shew a decline in the large majority of instances as follows:—

Russian Ordinary and Preference lost 6d. per share at 5s. 6d. and 7s., Shell Transport Ordinary a similar sum at $2\frac{3}{8}$, Spies 9d. at 8s. 3d., Californian Oilfields $\frac{5}{16}$ at $6\frac{1}{16}$, and Baku Ordinary 3d. at 3s. 3d.

The only improvement was in Anglo-Russian shares which rose 1s. 6d. at 3s. 6d., while Baku Preference at 6s. and Schibaieff Ordinary at 5s. 6d. were without change.

The Roumanian Petroleum Industry during 1906.

NEW POINTS BROUGHT OUT IN THE CONSULAR REPORT.

Not a few new points are brought to light in regard to the Roumanian petroleum industry by the annual report upon the trade of Roumania, which has just been issued from the pen of Consul Wardrop. In the first place the writer refers to the continuous advance made by the petroleum industry, pointing out that for the last five years petroleum has been the most important industry of Roumania, and it has made possible the general development of industry, which seemed doubtful when the Industrial Law passed in 1887. To-day, the railways, the naval and mercantile fleets are worked by it, it checks the destruction of the forests, saves a large expenditure on foreign coal, guarantees fuel in case of war, lessens the dependence of the country on grain export alone for its prosperity, gives work to the people, taxes to the State, and traffic to the railways. The capital invested is chiefly German, and there is now no British company of any importance; about half the export hitherto has gone to France.

The total production of petroleum in 1906 was 887,091 tons, an increase of about 45 per cent. over 1905, when the production was 614,870 tons.

Mr. Wardrop then shews to what an extent the production of petroleum in Roumania has increased during the past half a century. In 1857 the total petroleum production was 275 tons, and ten years later it had risen to 7,000 tons. During the next decade the total yield rose to over 15 000 tons, while in 1887 it was 25,300 tons. Then a period of remarkable activity and phenomenal development was witnessed, and by 1904 the total production of petroleum in Roumania stood at 500,000 tons—a figure which each year since has been left far behind.

The Consul sets out the operations of the various Roumanian refineries for the past two years as under:—

	Quantity 1905. Metric tons.	Quantity 1906. Metric tons	Percentage of Increase.
Benzine	78,182	114,428	46
Lamp Oil	153,499	221,683	44
Mineral Oils	17,255	53,588	210
Residues	237,677	333,714	40

There is an increasing demand for residues for factories. The export in 1906 was 50 per cent. more than in 1905, and in 1905 33 per cent. more than in 1904.

	Quantity. 1904. Metric tons.	1905. Metric tons.	1906. Metric tons.
Crude Gas Oil, Distilled, &c.	45,204	49,515	53,374
Refined (lamp oil)	78,270	118,134	196,631
Benzine	36,969	46,699	71,114
Total	160,443	214,348	321,119

Refined petrol thus shews an increase of 66·5 per cent. and benzine 52 per cent. over 1905. The benzine had mostly been sold for forward delivery, and did not, therefore, profit much by the high prices of 1906.

The United Kingdom was the chief purchaser of petroleum products during 1906, and took 28·4 per cent. of the whole export; but France and Germany took more benzine. It is interesting to note that the Argentine Republic and India were buyers, and that Germany, which has such a preponderant financial interest in the oil fields, bought only 15,565 tons of lamp oil. Constantza is the chief port of shipment (77 per cent.). Till 1898 crude alone was exported, but since then it has gone only to Austria-Hungary, while other countries take:—United Kingdom, residues and solar oil, for gas making; France, distilled, for making lamp oil (distilled is put under the heading of lamp oil because it contains 85 to 90 per cent. of the latter, the remainder being only coloured matter, which enables it to enter duty free as crude), and benzine. Roumania has profited by the misfortunes of Baku, and the increase in the use of motors.

The importance of liquid fuel for marine engines and other purposes is becoming more fully realised. Roumania is very favourably situated geographically, and the new sources of supply which are constantly being discovered seem to give justification for the belief that she may gradually gain a dominant position in this article, in which she is already unrivalled from the point of view of quality. Experiments made by the Service Maritime Roumain have shewn that on every trip made by their steamers there is a saving of more than £40 due to the use of this fuel, besides the additional advantages of cleanliness, saving of space and fewer hands. The Roumanian naval and mercantile fleet is the only one which exclusively uses petroleum fuel. At the oil fields themselves there is a large demand for residues, and it is reported that one of the works burned 12 per cent. of its production of crude for want of residues, caused by lack of satisfactory means of communication.

The small refineries have closed as larger ones have opened, but the existing 23 establishments have enormously increased their output during the last two years. 1906 was a prosperous year for them, and they have begun making the more expensive products, such as paraffin and various oils. They need large quantities of sulphuric acid, and a State protected factory for this article has been started at Campina.

The Consul then gives details of the paid-up capital invested in the Roumanian oil fields, which, he says, belongs to the following countries:—

Nationality.	Amount. Francs.
German	74,000,000
French	31,000,000
Dutch	22,000,000
Roumanian	16,000,000
Italian	15,000,000
American	12,500,000
Belgian	5,000,000
British	3,000,000
Other Nationalities	6,500,000
Total	185,000,000
Equivalent in sterling	£7,400,000

Some 15 new companies or amalgamations have been formed in 1906, and the new capital is about £2,400,000.

The nationality of the new capital invested in 1906 was:—

Nationality.	Amount. Francs.
French	22,500,000
German	16,500,000
Italian	7,500,000
American	7,500,000
Dutch	2,500,000
Belgian	2,000,000
Roumanian	2,500,000
Total	61,000,000
Equivalent in sterling	£2,440,000

The German Steaua Romana has a capital of over £1,500,000, and French investors are interested in it to the extent of £250,000. It paid a dividend of 8 per cent. in 1904-05, and 6 per cent. in 1906.

The following is a list of new petroleum companies formed in 1906, with their capital:—

	Francs.
Trajan Co.	5,000,000
Steaua Romana has issued new 5 per cent. bonds	4.920,000
Romano-American increased share capital	12,500,000
Colombia has increased capital from 1,200,000 2,800,000 francs, and issued 5 per cent. bonds to nominal value of	1,700,000
Petrolifera, a new company, capital	1,500,000
Alpha, a new company, capital	1,000,000
Credit Petrolifer, increased capital by	2,000,000
Italo-Romana has increased capital by	7,500,000
Campina-Moreni and Regatul Roman have amalgamated with a capital of	24,000,000
Aquila Franco-Romana has bought up Milisoara-Bustenari, which is liquidated, at	486,000
Roumanian Raky Co. founded, capital	2,000,000
First Roumanian Boring Co. founded, capital	700,000
Steaua Romana, further increase of capital	6,000,000
Sylva to take over Telega Oil (British)	10,500,000

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OPERATIONS OF THE ROUMANIAN REFINERIES IN MARCH.

The quantity of crude oil treated at the Roumanian petroleum refineries during March, 1907, was 75,537 tons. The output of various products, during the month, was as under:—

	Tons.
Benzine	10,910
Distillate and Refined Oil	20,760
Lubricating Oils	4,358
Residuals	36,256
Total	72,284

The quantities of oils delivered for home consumption during March were:—

	Tons.
Benzine	45
Distillate and Refined Oil	2,149
Lubricating Oils	392
Residuals	26,362
Total	28,948

The stocks of various products on March 31st were as under:—

	Tons.
Benzine	20,620
Distillate and Refined Oil	59,349
Lubricating Oils	19,933
Residuals	40,254
Total	140,156

ROUMANIAN PRODUCTION IN THE FIRST QUARTER OF 1907.

The production of crude oil at the various oil fields in Roumania in the first quarter of 1907, compared to the corresponding period of 1906, was as under:—

	3 months, 1907. Tons.	3 months, 1906. Tons.
Prahova District—		
Bustenari	124,980	114,001
Campina-Poiana	54,983	20,533
Moreni	62,797	23,975
Baicoi	8,550	6,562
Tinta	2,870	2,536
Bordeni-Parsani	1,150	—
Calinet	1,758	196
Faget-Doftanet	678	1,312
Other Fields	1,075	2,058
Total for Prahova	258,841	171,173
Dambovitza District	8,179	4,793
Buzeu ,,	2,312	2,935
Bacau ,,	2,065	2,352
Total	271,397	181,253

The output in the first quarter of 1907 shews an increase against the first quarter of 1906 by 90,144 tons, or 50 per cent., which is highly satisfactory. Practically the whole of this increased output was obtained in the Prahova district, in the three principal fields:—Bustenari, Campina and Moreni.

The production of the leading firms in the first quarter of 1907, compared to the corresponding period of 1906, was as under:—

	3 months, 1907. Tons.	3 months, 1906. Tons.
Steaua Romana	101,618	54,659
Regatul Roman Co.	47,156	13,165
Bustenari Co.	31,989	30,621
Romano-American Co.	23,959	5,450
International Co.	11,432	10,345
Sylva Co. (late Telega Oil Co.)	11,178	17,364
Colombia Co.	7,785	3,906
C. M. Pleyte and Co. (late Moreni Co.)	7,225	8,580
Trajan Co.	6,572	5,880
Arnheemsche Petroleum Co.	2,987	3,121
Aquila Franco-Romana	3,844	2,661
Seceleanu Bros.	3,331	2,309
Gallo-Romana Co.	1,337	831
Nafta Co.	1,840	2,968
Stanescu and Guiglescu	1,089	2,170
Negulescu Family	1,012	134
H. F. Drader	1,714	6
K. Ozinga	1,150	—

The production of the Steaua Romana was distributed among their different properties, as under:—

	3 months, 1907. Tons.	3 months, 1906. Tons.
Bustenari	41,434	26,604
Campina	52,052	16,632
Baicoi	4,343	6,168
Other Fields	3,789	5,255
	101,618	54,659

The total output of the Steaua Romana shews an increase of about 46,000 tons, or 85 per cent. The largest part of this increase was obtained at Campina, where the output has more than trebled. The Bustenari property also shews a very substantial increase of 14,800 tons, or 57 per cent.

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More Trouble at Batoum.—In the middle of last month work at the Mantascheff case factory was interrupted by a strike in the saw mills department. After a few days the dispute was settled and work resumed.

GALICIAN PRODUCTION IN MARCH.

The production of crude oil at the Galician oil fields in March was as under:—

	Production in Mar. Tons.	Stocks on Mar. 31st. Tons.
East Galician Fields—		
Boryslaw-Tustanowice	62,300	379,973
Schodnica	3,900	10,679
Urycz	1,150	5 247
Mraznica	80	224
Other East Galician Fields	1,020	1,060
West Galicia—		
Potok	950	4,232
Rogi	575	966
Rowne	155	338
Tarnawa-Wielopole-Zagorz ..	1,250	5,416
Krosno	2,500	11,671
Other West Galician Fields ..	2,160	4,968
Total	76,040	424,774

The deliveries from the oil fields during March amounted to 69,451 tons, whilst the stocks of crude oil have during this month increased by about 2,600 tons. The loss of crude oil by leakage or otherwise and the quantity consumed as fuel at the works, in March, amounted to 3,950 tons, of which 3,000 tons were at Boryslaw-Tustanowice.

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THE "PECK" PARAFFIN MARINE ENGINE.

The latest oil engine placed upon the market is that known as the "Peck" paraffin marine engine, and manufactured and supplied by the Caledonia Motive Power Supply Co., Ltd., of South Fort Street, Leith. The inventor of the engine—Mr. William Peck—is the well-known astronomer to the City of Edinburgh, but for the past four or five years he has devoted a considerable portion of his time to the invention of a paraffin oil motor for marine purposes. The outstanding features of the "Peck" engine are its extreme simplicity, the working parts being reduced to a minimum number. An impulse is given for every revolution of the fly-wheel. The engine, which runs with the same efficiency in either direction, is adaptable to all classes of work, and has advantages in the way of economy, and especially in great power developed. The explosive force is always exerted on the downward stroke of the piston, and the compression pressure is always generated on the return of the upward stroke. Another feature of the engine is that the fuel supply can be easy regulated while the engine is running. The fuel used consists of kerosene, or crude oil. An important feature is that when liquid fuel is used, it is atomised by compressed air while being blown into a heated atmosphere in the cylinder.

A large number of the "Peck" engines have already been ordered for marine purposes in Japan.

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PETROLEUM DEVELOPMENTS ON THE PERSIAN GULF.

The special representative of the *Times of India*, writing from Bushire under date of April 27th, says:—The Persian Parliament seems to be taking more than a passing interest in the Oil Concessions Syndicate. The terms of the concession were read to the assembled deputies some time ago, and were far from favourably received by a certain section. Boring has been in progress for some five years now, a start having been made north of Kermanshah in 1902. It is stated that oil was struck at that cite, but not in payable quantities. The difficulties attending the construction of a pipe line from the Kermanshah district would be many. Should the line be carried through Turkish territory *via* Baghdad the vexatious delays inseparable from a foreign enterprise on Turkish soil would probably delay its construction indefinitely. The natural difficulties of the route from Kermanshah to Mahomerah, or to a point on the shore of the Persian Gulf, are very great. The line for practically the whole of its length would have to pass through a country mountainous and rugged to an extreme degree. These considerations probably decided the syndicate in 1905 to remove to a site near Ahwaz, on the Karun River. The borings at Shahrdin and Mahmoudin in this district, according to reports received at Mahomerah, have been abandoned, and a fresh start has been made some distance to the north of Shahrdin, near the site of some ancient fire temples. Indications of petroleum are everywhere plentiful, but the syndicate have evidently yet to find the right spot. Bazaar rumour places the amount spent up to date at £500,000, but probably half of this sum would prove nearer the mark.

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THE PETROLEUM TRADE OF NOVOROSSISK IN THE FIRST QUARTER OF 1907.

The petroleum trade of Novorossisk during the first quarter of 1907 is shewn in the following figures of the arrivals of petroleum products at that port from Baku and Grosny, and of the shipments to Russian and foreign ports. The arrivals of various products during the quarter were as follows:—

	From Baku. Poods.	From Grosny. Poods.	Total Poods.
Refined Kerosene ..	198,730	302,006	500,736
Crude Oil..	—	996,257	996,257
Benzine	—	540,553	540,553
Ligroin	—	7,694	7,694
Total	198,730	1,846,510	2,045,240
Total, 3 months 1906	1,970,396	1,602,596	2,872,992

The shipments of petroleum products from Novorossisk were as under:—

	Abroad.	To Russian Ports.	Total.
Refined Kerosene ..	653,939	356,792	1,010,731
Residuals	—	657,427	657 427
Benzine	448,668	1,168	449,836
Goodron	—	166	166
Total, 3 months 1907	1,102,607	1,015,533	2,118,160
Total, 3 months 1906	1,297,325	775,283	2,072,608

It is interesting to note the development this year in the export of Grosny benzine *via* Novorossisk. In the first quarter of 1905 there was no benzine at all exported from Novorossisk. On the other hand, there were shipments of ligroin, which is a crude heavy benzine distillate obtained from Grosny oil, which this year has disappeared from the Novorossisk export trade.

PETROLEUM IMPORTS TO NORTH FORMOSA IN 1906.

The total import of kerosene to North Formosa in 1905, according to a Consular report, was 2,473,734 gallons, valued at £55,359. Of this total, 1,094,234 gallons was case oil from America, 890,264 was bulk oil from Sumatra, and 489,236 gallons was Echigo oil from Japan. The import from Japan largely increased in 1906, and is valued at £13,150, against £1,038 in 1905. Mr. Consul A. M. Chalmers points out that it is a cheap inferior oil, which the Formosan natives mix with the oils imported from America and Sumatra, and sell as the foreign import. This practice seems to have resulted in a reduction in the import of the American brand, which is the most expensive, and an increase in the Sumatran bulk oil.

THE TIN PLATE MARKET.

Messrs. Norton, Owen & Co., of 4, Bishopsgate Street Within, London, E.C., report under date 6th June, 1907, as follows:—

The demand for tin plates has continued unabated, and a very large amount of general business has been transacted in the course of the past fortnight for delivery up to the end of the year, and in some cases beyond. The works are almost without exception heavily sold and the general position of the trade appears to be healthier than it has been for some years. The mills are working up to their full capacity, yet in some cases difficulty is experienced in keeping pace with the demand; indeed, should a spell of hot weather set in and curtail the output, a "squeeze" for delivery of plates during the summer is not altogether improbable.

The wages question has again been settled by the Tin Plate Wages and Conciliation Board. Mutual concessions having been made, an agreement was come to at a conference on the 28th ult., whereby wages are fixed for another year, commencing July 1st, therefore no difficulties are anticipated in that direction. This is gratifying, bearing in mind the utter lack of organisation, and the consequent incessant strikes and disputes which prevailed in the tin plate trade prior to the formation of the Board in 1899, since when, in spite of great difficulties, it has succeeded in establishing uniformity of wages and in securing comparative peace and uninterrupted work.

The combination minimum selling prices remain unchanged, but the market is very firm and in many cases makers are quoting higher figures. We make prices of oil sizes, to-day, as follows:—

IC	18¾ × 14	124 sheets	110 lbs.	15/7½ to 15/9 per box.
IC	19¼ × 14	120 ,,	110 ,,	15/7½ to 15/9 ,,
IC	20 × 10	225 ,,	156 ,,	21/9 to 22/- ,,

F.o.b. Wales. Tin lining and iron hooping extra.

Telegraphic Address:—"OLEINE."

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AMERICAN NOTES

Mid-Continent Runs Drop.—During the first half of May a distinct drop was recorded in the oil runs from the Mid-Continent fields.

Nearly a Mile Deep.—It is stated by the Los Alamos Oil and Development Co. that it possesses the deepest well in California. The depth of the hole is a little over 4,500 feet.

A Good Dividend.—The Crowley Oil and Mineral Co., operating in the Jennings field, has just declared another dividend of 10 per cent. upon the stock, making the seventeenth dividend for a like amount paid by the company since July, 1904.

Santa Maria Activity.—The latest portion of the Santa Maria field to come in for popular attention is the Suey district, where land leases are being rapidly taken up. It is predicted that within three months, half a dozen companies will be working in the field.

The St. Louis Petroleum Company.—The St. Louis Petroleum Co., which has been recently incorporated, has now acquired property in Indian Territory estimated at about $10,000,000. The land acquired is mostly in the neighbourhood of Tulsa and Muskogee.

Activity in Canada.—The *Leamington Post* states that an oil boom is prevalent in the Sandwich East field as a result of a considerable sum of money being forthcoming for developing the territory. The formation in the district is said to be similar to that of Tilbury and other Canadian fields.

An Independent Line.—The *Oil, Paint and Drug Reporter* records in a dispatch from Bakersfield, Cal., that a project is on foot for the building of an independent pipe line to tap the Kern River, Coalinga, Midway, and other fields. But we have heard of such things before that have never materialised.

In the Midway Field.—We have it on the authority of the *Oil, Paint and Drug Reporter*, that the prospects for activity in the Midway fields are bright. The Standard Oil Co.'s new line which will tap the section has aroused oil men to much enthusiasm, and a large amount of oil will probably soon be forthcoming from this field.

Another Oil Boom.—A new oil region has been discovered about 50 miles south of Ely, and near the Nevada-Utah line. The oil is found in plentiful quantities in the shales which abound in the region, an examination of these shewing that they contain as much as 25 per cent. of bituminous matter. Active exploration and development of the district will begin almost immediately.

At Nacogdoches.—We learn that though operations continue on the deep test in the Nacogdoches field being put down by the Higgins Co., the outlook is very discouraging. The test is now 1,600 feet deep, and apart from traces being encountered a few hundred feet down, there have been no indications. The small producing wells in the field receive their oil from depths varying from 100 to 300 feet.

The Indian Territory Field.—Professor C. N. Gould, the Geologist for the State University at Oklahoma, gives his opinion that at the present time not one-third of the future oil field of Oklahoma has been prospected, and that not one-tenth of it has fully developed. He bases his conclusions upon the geological structure of the rocks and the conditions under which oil and gas have been found in other parts of the country.

Good News from Mexico.—It is reported that another gusher has been brought in by the Mexican Petroleum Co. on their property in the Ebano fields. This gusher is now flowing at the rate of 1,800 barrels per day. It is stated that the Mexican Central Railway is taking considerable quantities of fuel oil from the Mexican Petroleum Co. for use upon its locomotives, all the engines being equipped for the burning of oil.

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Hospitals for the Roumanian Oil Fields.—The firms operating in the Campina and Bustenari oil fields have resolved to build two hospitals—one at Campina and another at Bustenari—and have undertaken to contribute towards the fund for this purpose at the rate of 2 francs per waggon of crude oil produced.

AMERICAN PETROLEUM EXPORTS.

STATISTICS FOR APRIL.

According to the official publication of the Washington Bureau of Statistics, the exports of petroleum from America from the various ports during April were as under:—

	1906. Quantities. Gallons.	1907. Quantities. Gallons.	
Crude—			
Baltimore	—	—	
Boston and Charlestown	—	—	
Delaware	2,354,272	—	
New York	—	2,900	
Philadelphia	4,788,767	7,139,896	
Galveston and Sabine	1,656,941	9,795	
Total	8,799,780	Total .. 7,152,591	
Total value for the month, 1906			$509,784
,, ,, ,, 1907			$522,833
Naphthas—			
Baltimore	—	—	
Boston and Charlestown	—	3,339	
Delaware	—	—	
New York	2,332,898	2,212,507	
Philadelphia	1,278,626	1,813,719	
Galveston	—	—	
Total	3,611,524	Total .. 4,029,565	
Total value for the month, 1905			$270,348
,, ,, ,, 1907			$339,982
Illuminating—			
Baltimore	938	496	
Boston and Charlestown	5,736	4,883	
Delaware	—	—	
New York	43,502,301	43,871,991	
Philadelphia	20,846,182	19,279,838	
Galveston	2,513,553	1,447,828	
Total	65,868,710	Total .. 64,605,036	
Total value for the month, 1906			$4,216,368
,, ,, ,, 1907			$4,494,403
Lubricating—			
Baltimore	462,540	348,600	
Boston and Charlestown	10,276	20,426	
Delaware	—	—	
New York	9,680,128	7,612,929	
Philadelphia	4,018,383	2,044,335	
Galveston	18,928	1,012,001	
Total	14,190,255	Total .. 11,038,291	
Total value for the month, 1906			$1,683,952
,, ,, ,, 1907			$1,405,484
Residuum—			
Baltimore	—	—	
Boston and Charlestown	—	—	
Delaware	—	—	
New York	1,984,535	400,000	
Philadelphia	1,779,684	7,036,905	
Galveston	—	939,988	
Total	3,764,219	Total .. 8,376,894	
Total value for the month, 1906			$111,253
,, ,, ,, 1907			$276,293
Total Mineral Oils—			
Baltimore	463,478	349,096	
Boston and Charlestown	16,012	28,648	
Delaware	2,354,272	—	
New York	57,499,862	54,100,327	
Philadelphia	32,711,642	37,314,694	
Galveston	4,189,422	3,319,612	
Total	97,234,688	Total .. 95,202,377	
Total value for the month, 1906			$6,791,705
,, ,, ,, 1907			$7,038,995

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PETROLEUM IMPORTS INTO YOKOHAMA.

The imports of petroleum products into Yokohama during March of this year amounted to 1,229,397 gallons, and were valued at 245,880 yen, as against 2,226,274 gallons for the corresponding period of last year valued at 450,253 yen. The petroleum imports for the two months of this year reached 2,984,162 gallons, and were valued at 575,628 yen.

OUR AMERICAN LETTER.

. . From Our Own Correspondent. . .

Pittsburg, *May 20th*, 1907.

As I suggested in my last letter to the Review, development work and the search for new pools in the lower South-west and the South-eastern Ohio fields are not bringing results such as should follow the efforts making in all quarters to find new production. All agree that the conditions are now favourable for active operations in all fields and it is the time of year that operators are wont to get busy.

The old fields, long since defined, have more work under way and starting than for some years. This work consists principally of drilling a well here and there where the location was passed by in the days when producing territory was not so hard to find as at this time. The new wells drilled in these old fields are nearly all light pumpers or total failures. The wells that have been producing for so many years have impoverished the producing formation and in many instances when drilled through, sand is found of a good quality and thickness, but it contains no oil. This, in a degree, accounts for so many dusters completed recently in the local fields.

The new pools discovered since the first of the year are confined to the lower South-west and all are congested. None of the new pools has had a production of scarcely more than a 1,000 barrels a day and that for a very short period. The old wells decline so rapidly that the new cannot supplant the falling off and the hopes of those who invest in territory in advance of developments are soon dissipated by the pool being defined without reaching their holdings.

The Big Injun pool on Dry run, in Ellsworth district, Tyler county, is an illustration of how quickly prospective conditions can be reversed. A month ago the pool was producing a 1,000 barrels a day and at the present time it is not more than half that amount. There has been no let-up at any time in development work, but the new wells are light, as compared with the first few completed in the development, and they have no reserve territory to draw from. The result is a speedy decline.

The best discovery of the year is the Congo pool in Hancock county. As now developed it does not contain more than 200 acres of producing territory, and the possibility of extending its producing area is not any too encouraging. During the past week two test wells, both located in advance of developments, were drilled in, and neither found any oil. To the east and north the test on the Hamilton farm is a good producer, and advances the producing lines a quarter of a mile in that direction. Inside of defined limits new wells are coming in with a good deal of regularity, and they are of sufficient producing capacity to prevent a sudden decline in the daily production of the pool. The output of the district remains at about 1,000 barrels a day.

The efforts that have been made to carry the producing lines across the Ohio river into Jefferson county have not materialised. The well drilled near the river, on the Ohio side, and on what was thought to be a good line for connecting with the Congo pool, proved a failure. Land owners, who have not leased in the Congo district, are still holding out for bonus and from a quarter to one-half royalty. Operators are not inclined to meet such demands when the chances for extending the producing limits are so very slim.

Many inquiries are directed to the future prospects in the "Little Mountain State." There is still room for new pools, but if they are to be found in the present defined areas they must necessarily be small. The old fields have been rather closely developed, but there is still room for small pools intervening. For some years the new discoveries have consisted of nothing more, with the exception of the Rowells Run extension in Roane county, and the possible discovery of a Berea grit pool in the extreme lower south-west in Lincoln county.

In the first-named development the size of the late completions is such as not to create any amount of enthusiasm. There is no doubt that a large acreage of territory can be developed in that county, with the result of a multiplicity of light pumpers. It is not inexpensive territory to develop. Very few of the wells find production at a less depth than 2,000 feet, and the cost of equipment is not a small item. With operators bending every energy to secure more high-grade production, Roane county has not shewn the activity that was expected early in the year. The first wells drilled in this county, or in what is called the Rowells Run extension, averaged about 30 barrels at time of completion. Had this average been maintained, a different state of operations would now prevail in the county. Taken as a whole, the wells completed within the past three months have not had an initial production of more than 10 barrels. Allowing for the natural decline, it will be readily seen why development work has been lagging.

Operators on the Ohio side are not making any new discoveries. There is a good deal of activity in old territory, but the result is far from satisfactory. With a very few exceptions, the late completions have been light pumpers or dusters. In the Woodsfield district, in Monroe county, two wells were completed on the the Denbow farm during the week, which have a production of 30 to 40 barrels respectively.

Washington county has nothing to offer as an inducement for any increase in operations. The discovery of new pools is very remote. Operators are drilling all over the old fields, and the result is nothing better than light pumpers. In Noble county an occasional fair producer is completed, and in Athens there is some new work starting.

Of the counties bordering on the Ohio river, Jefferson has a larger volume of territory that has not been thoroughly tested than any other. Operators are giving this county some attention. It would not be a surprise if in some locality a new pool has been discovered before the close of the year.

The deep sand pool at East Akron is not causing any stir. The oil in this district is found at a depth of 2,800 feet, and it is not likely that any great amount of new work will be started in the near future.

THE OIL FIELDS OF CALIFORNIA.

Description of the Los Angeles and Puente Hills . . Districts. . . .

(Continued from page 302.)

From surface indications the position of the North Whittier wells seems to be somewhat analogous to that of other wells in such productive fields as Coalinga, Midway and Sunset, where petroleum occurs in formations having remarkable evenness of dip, strike and succession.

The productive wells of the Whittier field embrace those of the Home, Turnbull, Canyon, Turner, Fidelity, Strong, Central, Warner and Murphy oil companies. Other companies have drilled at various points in the field, but thus far without success. In general the wells immediately south of the fracture have been found productive; those to the north unproductive.

La Habra Canyon Field.

The region of La Habra Canyon occupies the heart of the Puente Hills midway between the Whittier and Puente fields. It has an east-west length of about three miles, the productive territory being near the west end.

The only wells of the La Habra district are those of the Union and New England Oil Companies. They lie in two groups, the Sansinena wells, belonging to the Union Company, are situated in the gulch bottom a little south of the axis of what to the east is probably the main anticline; the other group is on the crest of the ridge, half a mile to the north-west, in highly disturbed strata close to the axis of one of the subordinate folds. The production of these wells is not large and the oil is comparatively heavy. A maximum depth of nearly 2,000 feet has been attained, although most of the wells are said to be much shallower. Oil is reported to the depth of 1,850 feet. The formations in the deeper wells embrace 300 or 400 feet of Fernando conglomerate at the top, followed by shale and sandstone below, in part, perhaps of the Fernando, in part older.

Puente Field.

The Puente oil field lies along the crest of the Puente Hills and of the genaral anticline forming them. It is about one and a half miles north-west of the mouth of Brea Canyon and three miles east south-east of the developed territory of La Habra Canyon. The productive area is approximately one mile and a quarter long by one-eighth mile wide, the length corresponding with the general strike of the beds (N. 70° W.)

The wells of the Puente oil field are those of the Puente Oil Co., which now penetrate the lower shale of the Puente formation to a depth of nearly 2,000 feet, although for years 800 or 900 feet was the maximum. Oil is drawn from many layers of sand of varying thickness, some of the lower being especially productive and others affording but a minimum yield. The depth of 2,000 feet attained by the drill, together with the amount of erosion that must have taken place from the arch of the fold, indicates that this division of the Puente is at least 2,500 feet thick, the thickness of the entire formation being still undetermined.

The wells of the Puente Oil Co. are among the oldest in California, dating back to the year 1885. Their production until recently has never been large, but has been maintained with marked constancy. Some of the newer wells have yielded 100 to 200 barrels of oil a day, but, as in the case of all other fields, this amount has decreased as the pressure has diminished and the territory has become drained. During 1905 but a few of the wells in this field were being pumped, and these only to avoid flooding. The oil is an olive-green to black colour by reflected light and varies in gravity from 22° to 35° B.

Brea Canyon Field.

Brea Canyon finds exit from the Puente Hills five miles north-north-east of Fullerton in the vicinity of one of the most important oil districts in the territory. Below the fork the canyon assumes the trend of the main Puente anticline and lies close to the zone of maximum disturbance. At a point where the beds have been locally crushed it cuts directly through the outer terrane of the hills and passes into the valley.

The companies operating in the Brea Canyon field are the Brea Canyon, the Union and the Menges. Other companies have drilled wells, but thus far without success. The wells of the Brea Canyon Oil Co. occupy a small area on the northern slope of Brea Ridge adjacent to the mouth of the canyon, their number being 21. To the east, also on the northern slope of the ridge, is the area drilled by the Union Oil Co., 32 wells being distributed along the strike of the beds for a distance of one mile and a half. The Menges Oil Company's property adjoins that of the Brea Canyon Co. on the west, lying just west of the mouth of Brea Canyon. This company has two wells.

The wells of the Brea Canyon Oil Co. are sunk in the conglomerate and sandstone of the Fernando formation, which strike N. 70° W. and dip about 50° S., both with considerable regularity. The strata cut are exposed, in part at least, in the northern slope of Brea Ridge, and along the stream bottom. Is is impossible, however, to affirm that these horizons have furnished even a portion of the oil yielded, so at variance are the records of the wells when compared one with another and with surface exposures. It may be that owing to the crushing that has taken place adjacent to the fault and its possible extension to the region of the wells oil has filtered from the beds originally containing it into others until there has been a general diffusion of the fluid through the more porous strata along channels that for some reason have more readily permitted migration. In marked contrast, however, to the fine wells of this company on the south side of the canyon are those on the north side, where in strata far more disturbed little or no success has been attained.

The wells of the Brea Canyon Oil Co. vary in depth from 600 to nearly 2,000 feet, in production from 12 to perhaps 1,000 barrels per day, in the gravity of their oil from 18° to 26° B. The heavier oil is said to come from the upper sands, the lighter from the lower. The product of the wells is run to a common tank with a resultant gravity of between 21° and 22° B.

The westerly wells of the Union Oil Co. adjoin on the east those of the Brea Canyon Co., and the territory in which they are drilled, except for a slight undulation of the strike from a few degrees north of west to an equal amount north of east, is stratigraphically and structurally similar so far as surface exposure indicate. A marked difference in the productiveness of the two areas has been revealed by development, however, the many conditions in depth familiar to all students of oil occurrence probably being sufficiently variant in the two areas to cause the widely differing results obtained. It is unsafe as a general rule to predict the success of a proposed group of wells upon that of a group already drilled; and, on the other hand, it is equally difficult to offer a tenable reason for the superior yield of one area over another, the conditions available for observation in the two being practically the same. Where there is a noticeable variation in surface conditions between two localities there is likely to be an equal variation in underground conditions, and it would not be unreasonable to expect a marked difference in the results of drilling. In illustration of this may be compared the eastern part of the Union Co.'s tract in Brea Canyon and the western part already referred to. In the eastern part, the strata shew a distinct bowing to the south, and, moreover, the area is in proximity to a couple of folds that are traceable from the Olinda field. The conditions in the western part are more regular, the beds dipping rather uniformly toward the south. While in the light of experience it would be impossible to predict whether the eastern area would be more or less productive than a mile to the west, it would be a fair inference that there would be a material difference in the yield of the two, and such a difference has been found by exploitation.

The territory of the Menges Oil Co., which adjoins that of the Brea Canyon Co. on the west, is structurally at variance with both productive tracts described above, and has so far yielded smaller wells. The general horizon at which oil is obtained by the Menges and the Brea Canyon Companies is the same, but between the two tracts, strongly developed at the sharp bend in the canyon, is a compound flexure involving the oil-bearing strata, in part at least, of both properties. The flexure is as local as it is sharp, and disappears within a short distance of the stream. In the Menges tract, however, the strata are more disturbed than in that of the Brea Canyon Co., shewing local and abrupt variations in both strike and dip, at one or two points with distinct overturns having a northerly dip.

The foregoing discussion has been carried to considerable length at this point because of the typical example afforded by the Brea Canyon field of the varying conditions attendant on the occurrence of petroleum within a comparatively small area. This field illustrates also the impossibility of offering a definite opinion regarding the probable productiveness of a particular territory, an opinion frequently asked of the geologist by all interested in the petroleum industry.

Olinda Field.

The Olinda oil field lies six miles north-east of Fullerton, just within the southern edge of the Puente Hills, near the entrance to Soquel Canyon. It is connected with the main line of the Atchison, Topeka and Santa Fe Railway by a branch from Richfields, four miles south. As developed, the field extends along the strike of the measures, N. 65 degrees to 70 degrees W., about a mile and a-half, the breadth of the oil-bearing zone varying from one-eighth to one-third of a mile. The field is supplied with water from wells a mile or two out in the valley. In the immediate vicinity of the productive area, the principal features of topography include the main mass of hills, an exterior ridge which borders Telegraph Canyon on the south and extends for a mile beyond the entrance to Soquel Canyon, and an inner valley separating the hills from the exterior ridge. Development has taken place in this valley, and on the lower slope of the main mass of the hills to the north.

The oil wells of the Olinda field number over 100, and except a few, chiefly along the outer ridge, all have been of wonderful productiveness, yields of 700 to 1,000 barrels of oil per day having been reached. The maximum depth attained is 3,000 feet. The wells are ranged along two lines, the northern group following the zone of greatest disturbance, together with the fault, and the southern following the land line which separates the properties of the Sante Fe and Fullerton Consolidated Oil Companies, and having no connection whatever with the structure.

The oils of the Olinda field vary in gravity from 12° to 35° B., the heaviest being found at the west end of the field in members of the Fernando, those of 18° to 20° B. in the south-western part, also in the Fernando, and those between 23° and 35° B. in the Eastern half of the productive area in various horizons of the Puente.

(*To be concluded.*)

Lest we Forget.—No firm can become truly great without judicious advertising. Shall we send you the Review's rates?

The American Oil Market.

New York, Week ended May 25th.

The demand for high-grade oil has stimulated operations in what have been regarded as promising sections, but results, as a rule, have been disappointing; and the difficulty of supplying the increasing inquiries seems to be no nearer solution. A number of leases in high-grade territory are still being held for further developments. Light completions have signalised the operations in Pennsylvania. Work in the new fields has not been of a character to arouse much interest, and prospecting for extensions to old pools has yielded no important results. The Tyler county gusher, which last week was credited with 600 barrels, has dwindled to 230 barrels. Other ventures in the same county produced light pumpers, few exceeding 10 barrels. Some fair gassers were encountered in Harrison county. A fifty-barrel producer was the result of a nine-foot drilling. A duster was encountered in the Congo field, and similar results were reported from Logan county. Considerable experimental work is being pushed, some of it partaking of a wildcat nature. Adjoining the Pennsylvania line, in Garrett county, Maryland, a company has been started, says the *Oil, Paint and Drug Reporter*, to work a lease of 11,000 acres, and a drilling of 4,000 feet has been permitted on the first well. Pittsburg operators have been attracted to the Illinois field, and have been encouraged by striking a well in Lawrence county which is said to yield a grade of oil above the average for the State. A second test of a well that started at 100 barrels a day several months ago was credited with eleven barrels an hour. Operations in Robinson county met with some success, a 150-barrel producer being reported on a stretch of new territory, and other developments bringing in a well of equal productivity and two scoring 100 barrels. Light results have characterised the work in the Ohio fields, although search for high-grade producers has been keenly prosecuted. A marked increase in the number of dry holes in the south-eastern part of the State has been noted. Encouraging prospects have been reported from Kentucky, where prospecting work has been resumed in Wolfe county. News from Los Angeles indicate that the production is being maintained to the average of last year, new operations compensating for the decrease in the yield from the old wells.

Refined and Products.—A feature of the week in the market for refined has been the engagement of 155,000 cases for four ports in Java, New York or Philadelphia loading, and a similar quantity for Japan, Philadelphia loading. Exports of refined during the week have aggregated 7,362,820 gallons. There has been a steady movement for home requirements, and the market has remained firm at unchanged quotations. The English and Indian markets have remained firm but without change.

The products for gas engine consumption have been in active demand, and with supplies barely commensurate with requirements, the market continues to rule with firmness. Exports during the week include 55,600 gallons of naphtha.

CLOSING QUOTATIONS.

Crude.	Week ended May 18. 1907.	May 25. 1907.
Pennsylvania crude in bbls.	$8·20	$8·20
Pennsylvania crude in bulk	4·75	4·75
Residuum, bbls. for export	6@6½	6@6½

Crude at the Wells.

The quotations for oil represented by credit balances were ;—

	Week ended May 25. 1906.	May 25. 1907.
Tiona	1·74	1·78
Pennsylvania	1·64	1·78
North Lima	0·98	0·94
South Lima	0·93	0·89
Indiana	0·93	0·89
Canadian Oil:		
Petrolia	1·37	1·34

Refined—For Export.

		Week ended May 25. S.W.	W.W.
Barrels, cargo	per gal.	$8·20	@10 20
Philadelphia	.. ..	8·15	@10·15
Bulk, New York ..	.. ..	4·75	@ 6·75
Bulk, Philadelphia ..	.. ..	4·70	@ 6·70
Cases, New York ..	.. ..	10·65	@13·65
Cases, Philadelphia ..	.. ..	10·60	@13·60

Refined in Cases—110 Fire Test.

	Week ended May 18. 1907.	May 25. 1907.
3,000 to 10,000..	10·80	10·80
1,000 to 3,000..	10·85	10·85

Refined—Jobbing Lots.

In barrels, pkgs. included.

		Week ended May 18.	May 25.
120 fire test, S.W. ..	in barrels	12	12
130 fire test, S.W. ..	.. ..	12½	12½
150 fire test, W.W. ..	.. ..	13½	13½
In bulk from tanks	.. ..	10	10
300 fire test	.. ..	13¼@14	13¼@14

Naphtha and Gasolene.

	Week ended May 18.	May 25.
Naphtha, crude, car. lots, 68 @ 72 deg.	—	17·00
Gasolene, 86 deg...	17·00	24·00

Pennsylvanian Oil Runs from May 10th to May 13th were:—May 10th and 11th, 150,958; May 12th, 174,172; May 13th, 163,161. For the month of April, 2,921,463.

The Deliveries of Pennsylvania Oil from May 10th to May 14th were:—May 10th, 180,834; May 11th and 12th, 312,072; May 13th, 193,275; May 14th, 187,581. For the month of April, 1,395,486.

Charters for the Week.

The total charters for refined, crude, naphtha, etc., in bulk, barrels and cases, during the week ended May 3rd and from Jan. 1st, were as follows:—

	Week.	Year.	1906.
Refined, barrels and bulk	691,000	5,403,020	3,794,800
Refined, cases	545,430	5,995,440	5,691,000
Crude, barrels and bulk..	69,880	378,950	644,500
Crude, cases	—	—	187,000
Naphtha, barrels	17,890	35,000	176,000
Residuum, barrels ..	20	155,370	288,600
Lubricating, barrels ..	—	—	128,200
Total, barrels cde. eq. ..	525,890	9,696,470	8,630,556

Clearances for the Week.

During the week ended May 17th, and since Jan. 1 the clearances of petroleum, in gallons, from the port of New York, were as follows:—

	Week.	Year.	1906.
Refined	7,362,820	187,753,860	181,575,990
Crude	—	1,039,925	226,800
Naphtha	55,600	2,557,420	7,463,767
Residuum ..	—	307,087	—

Export Statistics.

The total exports from the port of New York and from the United States have been:—

	Gallons.
From New York, week ended May 17th ..	9,817,093
Total from New York, from Jan. 1st, 1907 ..	256,845,666
Same period last year	231,587,187
Increase	15,480,386
From United States, week ended May 10th ..	24,736,451
Total from United States, since Jan. 1, 1907	419,858,193
Same period last year	442,906,297
Decrease	23,048,104

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The "Review" Shipping List.

June 7, 1907.

(The following abbreviations are used in this table:—L. Left; P. Passed; Arr. Arrived; Sp. Spoken; Tr. Trading.)

Vessel.	From	For.	Latest Date and Position.
ALCHYMIST	London	Poole	L. June 3
ALICE ISABELLE	La Rochelle	Philadelphia	L. May 8
ALEMBIC	Sydney (C.B.)	New York	Arr. May 20
AMERICAN	New York	Puerto Mexico	P. Sand Key, May 7
APPALACHEE	Hankow	San Francisco	Arr. Hong Kong, May 11
APSCHERON	Trieste	Ibrail	Arr May 30
ARAL	Tyne	Philadelphia	Arr. May 29
ARAS	New York	Foynes	Arr. June 3
ARGYLL	—	—	Coasting U.S. (Pacific)
ASHTABULA	San Francisco	Shanghai	L. May 9
ASTRAKHAN	Tyne	Philadelphia	P. Butt of Lewis, May 30
ATLAS	—	—	Coasting U.S. (Pacific)
AUGUSTA	New York	Havana	L. May 14
AUGUST KORFF	Philadelphia	Hamburg	Arr. June 2
AUREOLE	Barry	Philadelphia	Arr. May 31
AZOV	—	—	Trading on W.C. of South Amca.
BAKU STANDARD	Kustendje	France	L. May 26
BALAKANI	Kustendje	London	Arr. June 1
BATOUM	Hong Kong	Palembang	L. May 1
BAYONNE	Savona	Philadelphia	Arr. June 3
BEACON LIGHT	Novorossisk	Rouen	P. Constanti'ple, June 1
BEME	Rangoon	Bombay	L. May 13
BLOOMFIELD	Dublin	Philadelphia	Arr. May. 25
BORJOM	Batoum	Alexandria	P. Constant'ple, May 29
BRILLIANT	Philadelphia	Copenhagen	L. May 24
BROADMAYNE	Port Arthur (Texas)	Manchester	P. Sabine Pass, May 20
BULLMOUTH	Hankow	Shanghai	Arr. May 25
BULYSSES	Cardiff	Port Said	L. June 3
BURGERMEISTER PETERSEN	New York	Swinemunde	L. May 28
CALCUTTA	Shanghai	San Francisco	Arr. May 12
CARDIUM	Cardiff	Singapore	At Aroe Bay, June 3
CATANIA	Gaviota	Salina Cruz	Arr. May 3
CAUCASIAN	Cardiff	Kustendje	Arr. June 1
CHARLOIS	New York	Rotterdam	P. Lizard, June 5
CHESAPEAKE	Singapore	New York	At Suez, May 31–June 1
CHESTER	New York	Antwerp	L. May 24
CIRCASIAN PRINCE	Buenos Ayres	Callao	P. Monte Video, May 5
CLAM	Balekpappan	Palembang	Arr. June 4
COL. E. L. DRAKE	New York	San Francisco	L. May 5
COWRIE	Port Natal	—	L. May 4
CYMBELINE	Barry	Batoum	P. Sagres, June 1
CZAR NICOLAI II.	Hamburg	Batoum	P. Dover, June 2
DAGHESTAN	Batoum	Antwerp	P. Gibraltar, June 5
DAKOTAH	San Francisco	Hong Kong	Arr. June 1
DELAWARE	Kurrachee	Bombay	Arr. May 10
DEUTSCHLAND	Rotterdam	New York	Arr. May 28
DIAMANT	Rotterdam	New York	P. Lizard, June 1
EDWARD DAWSON	Swansea	Port Arthur (Texas)	P. Mumbles, May 23
ELAX	Philadelphia	Calcutta	P Perim, June 1
ELSIE MARIE	New York	Hamburg	Arr. June 1
ENERGIE	Philadelphia	Swinemunde.	L. April 25
ERIVAN	Batoum	Liverpool & Manchester	At Liverpool, June 4
ETELKA	Serville	Philadelphia	P. St. Michael's, May 29
EUPLECTELA	Tyne	Batoum	P. Gibraltar, May 25
EXCELSIOR	Hamburg	New York	Arr. May 30
EZIO	—	—	Coasting Peru
FRANCE MARIE	Philadelphia	Marseilles	Arr. May 22
GEESTEMUNDE	Stettin	New York	P. Butt of Lewis, May 27
GENESSE	Philadelphia	Liverpool	Arr. May 26
GEORGIAN PRINCE	New York	Havana	Arr. June 6
GOLDMOUTH	Balekpappan	—	P. Singapore, May 16
GUTHEIL	Tyne	Philadelphia	P. Dunnet Head, May 29
HAINAUT	Patras and Rotterdam	Hamburg	Arr. May 26
HARRY WADSWORTH	Swansea	—	P. Mumbles, June 5
HELOIS	Philadelphia	Hamburg	P. Lizard, June 3
HERMIONE	Penarth	Batoum	P. Gibraltar, June 5
HOTHAM NEWTON	Batoum	Hamburg	P. Constant'ple, May 31
HOUSATONIC	Philadelphia	Avonmouth	P. Del. Break., May 23
IMPERIAL	—	—	Tr. on Lakes btn, U.S.A. and Can.
JOANNIS COUTZIS	Batoum	Rouen	Off Ushant, June 4
J. B. AUG. KESSLER	Singapore	—	At Suez, June 1
JAMES BRAND	Manchester	Philadelphia	L. May 23
JULES HENRI	Barcelona	Philadelphia	P. Gibraltar, May 2
KURA	Newport	Constant'ple	P. Barry Island, June 5
LA CAMPINE	New York	Antwerp	Arr. June 5
LA FLANDRE	Philadelphia	Ghent	P. Prawle Pt., June 5
LA HESBAYE	Antwerp	Batoum	Off Pantellaria, May 31
LA MADELEINE	Bordeaux	Oran	L May 25
LA VIGUESA	Philadelphia	Vigo	P. Del. Break, May 23
LACKAWANNA	Kustendje	Bombay	Arr. May. 31
LANSING	Astoria	San Francisco	Arr. Mar. 14
LE COQ	Blaye	Kustendje	P. Dardenelles, May 31
LOUTSCH	Dunkirk	Novorossisk	L. Constant'ple, May 29
LUCERNA	Bergen	Tyne	Arr. May 23
LUCIFER	New York	Dublin and Belfast	Sunk April 16, 40° 18 N., 60 W.
LUCIGEN (Now Cuyalogo)	Liverpool	Philadelphia	Arr. May 23
LUCILINE	Dunkirk	Cardiff	Arr. May 25
LUMEN	Tyne	Philadelphia	L. June 4
LUX	Novorossisk	Havre	L. Constant'ple, May 28
MANHATTAN	New York	Savona	Arr. May 30
MANNHEIM	Tyne	Philadelphia	P. Dunnet Head, June 2
MARGARETHA	Batoum	Avonmouth	L. Constant'ple, May 31
MAVERICK	Redondo	San Francisco	L. Ventura, May 16
METEOR	Batoum	Vladivostock	At Singapore, about May 16
MEXICAN PRINCE	Cienfuegos	Liverpool	Arr. May 24
MIRA	Blyth	New York	P. Dunnet Head, May 31
MUREX	Samboe	—	L. Tientsin, June 1
NARRAGANSETT	Tyne	New York	P. Dunnet Head, May 27
NERITE	—	—	Tr. in China Seas
NEW YORK	Southampton	New York	P. Nantucket, June 1
OCEAN	Batoum	Antwerp	Arr. June 4
OILFIELD	Cette	Philadelphia	Arr. June 4
ORANJE PRINCE	Tyne	Banes	Arr. May 30
ORIFLAMME	New York	Rouen	L. Havre, June 3
OSCEOLA	N. Orleans & Norfolk (Va.).	Genoa	Arr. May 27
OTTAWA	Philadelphia	Galveston & Vera Cruz	P. Sand Key, May 21
OURAL	Batoum	Genoa	Arr. June 4
PALEMBANG	Calcutta	Aroe Bay	L. April 15
PAULA	Danzig	Tyne	L. June 3

Vessel.	From.	For.	Latest Date and Position.
PECTAN	Port Arthur (Texas)	Newport Nws	Arr. June 1
PENNOIL	Philadelphia	Dover	L. May 24
PERLAK	Madras	Aroe Bay	L. April 24
PHOEBUS	Hamburg	New York	P. Dunnet Head, May 28
PINNA	Antwerp	San Francisco	Off Ushant, June 2
POTOMAC	New York	Liverpool	Arr. June 2
PROMETHEUS	Rotterdam	New York	L. May 25
PRUDENTIA	Rouen	Tyne	Arr. April 18
QUEVILLY	Rouen	Philadelphia	P. Lizard, May 11
RION	Kustendje	Hull	L. June 3
ROCK LIGHT	Sunderland	Tyne	Arr. May 26
ROMANY	Thameshaven	Rotterdam	Arr. May 29
ROSSIJA	Rotterdam	Archangel	L. Tyne, May 21
ROTTERDAM	Amsterdam	New York	P. Lizard, June 6
RUSSIAN PRINCE	Philadelphia	Havana	P. Reedy Island, May 21
SALAHADJI	—	—	Tr. Sts. Settlem'ts and Java Seas
SAN CRISTOBAL	Liverpool	Port Arthur (Texas)	L. May 18
SAN IGNACIO DE LOYOLA	Philadelphia	Pasages	P. Reedy Island, May 23
SAXOLEINE	Point de Grave	Philadelphia	Arr. May 31
SEMINOLE	San Francisco	Hankow	L. Shanghai, May 17
SINGU	—	—	Tr. in East Indies
SNOWFLAKE	Penarth	Cuba	P. Barry Island, June 5
SOPHIE	Batoum	Medi'ranean	Bchd. Mouth of Bosphorus, May 31
SPONDILUS	Barrow	Cardiff	Arr. May 27
STANDARD	Stettin	New York	Arr. June 5
STROMBUS	—	Kobe	Arr. May 30
SURAM	New York	Manchester	P. Browhead, June 6
SUWANEE	Tyne	Philadelphia	P. Dunnet Head, May 31
SVIET	Alexandria	Batoum	L. Constant'ple, April 30
TELENA	Bombay	—	L. May 26
TEREK	Batoum	London	Arr. June 4
TIFLIS	Batoum	Antwerp	L. June 4
TIOGA	London	Tyne	At Thameshaven, June 4-5
TONAWANDA	San Francisco & Hankow	Shanghai	Arr. May 30
TROCAS	Calcutta	Aroe Bay	Arr. June 3
TURBO	Batoum	—	At Malta, June 2-3
TUSCARORA	San Francisco	Calcutta	Arr. April 21
TWINGONE	Rangoon	Madras	L. May 30
VEDRA	Alexandria	—	At Port Said, May 31
VILLE DE DIEPPE	—	—	In Port Havre, May 29
VOLUTE	Soesoe	Shanghai	Arr. June 3
WASHINGTON	Bengkalis	Nordenhamn	P. Dungeness, June 5
WEEHAWKEN	Tyne	New York	P. Dunnet Head, May 25
WILLKOMMEN	New York	Rotterdam	L. May 29
WINNEBAGO	San Francisco	Japan	L. May 18

Latest Market Intelligence.

LONDON OIL MARKET.

Supplied by Messrs. Benjamin & Gee, 31, St. Mary Axe, E.C.

June 7th, 1907.

Refined petroleum remains unchanged as follows:—Russian and Roumanian, 6¼d.-6⅜d.; American, 6¾d.-6⅞d.; Water White, 7¾d.-7⅞d.

LUBRICATING OILS

There are no alterations to report in the quotations, which remain :—

American pale, £7 7s. 6d. to £11.
American dark cylinder, from £8 5s.
American filtered cylinder, from £11 2s. 6d.
Shellene, £5. No. 1 Russian, £10 7s. 6d.

TURPENTINE.

Turpentine for Spot is about 2s. 6d. lower than when last we reported, this fall being occasioned by the arrival here of a considerable quantity, but for forward delivery the prices are still firm. For Spot it is quoted 48s. 3d., and up to the end of the year 44s. 6d.

LIVERPOOL OIL MARKET.

June 6th.

Refined oils are quiet, and sellers quote 6⅛d. for Russian, Galician or Roumanian; and 6⅝d. to 7⅝d. per gallon for American.

Petroleum Spirit continues at 1s. 0½d. to 1s. 3d. per gallon for American deodorised, according to quality on the spot.

LATEST AMERICAN PRICES.

New York, June 6th.

Refined, in cases, is steady at 10·65; Standard White, 8·20; Credit balances, 1·78c.

Philadelphia, June 6th.

Standard White is still quoted at 8·15.

RUSSIA.

Baku, June 3rd.

The Baku oil market is very firm. Light crude oil, spot, 30¼ copecs per pood; heavy crude oil, 31¼ copecs; residuals, in ships, 31¾; kerosene, 34 copecs.

BELGIUM.

Antwerp, June 3rd.

The petroleum market is unchanged. Price of Standard White, spot, 21¼ francs per 100 kilos.

FRANCE.

Paris, May 31st.

Illuminating oil is quoted in bulk, in whole tank waggons, 23 francs per hectolitre; spirit, 31·25 francs per hectolitre. Special white oil, 31 francs per hectolitre.

GERMANY.

Hamburg, June 3rd.

The kerosene market is firm. The price of American Standard White is 6·80 marks per 50 kilos, Russian, 6·55 marks.

ROUMANIA.

June 1st.

	Francs.
Crude oil from different fields, including pipe line charges, per 100 kgs. ...	4·10-4·20
Refined oil, exclusive of taxes	9·00-10·00
Motor benzine, including taxes	23·00-24·00
Benzine, doubly refined	26·00-27·00
Residuals in tank waggons, at refinery ...	3·60-3·70
Paraffin	120·00-125·00

Prices for Export.

Refined oil in tank waggons, per 100 kgs.	7·50- —
Benzine, sp. gr. 0·710-0·715	23·00-24·00
,, sp. gr. 0·715-0·720	22·00-23·00
,, sp. gr. 0·730-0·740	15·00-16·00
,, sp. gr. 0·745-0·755	11·00-12·00

INDIA.

Bombay, May 18th.

Market strong.

Standard Oil Co., of New York.

Current rates are :—

	Rs.		
American, "Snowflake," 150 deg.	6	0	2
,, Chester, 125 deg.	4	8	2
,, Monkey Brand, 125 deg.	4	2	2
,, Bulk, 125 deg. (in local made tins)	3	10	0
,, ,, 125 deg. (8 Imperial gallons) ..	3	1	0
,, "White Camelia" brand, 125 deg. ..	No stock.		

The Asiatic Petroleum Company, Limited.

Current rates are :—

Burmah oil, in tins, per pair	3	6	0
Sumatra "Rising Sun," bulk, per unit	3	0	0
,, ,, tins, per pair	3	10	0
Silverlight cases, per case	5	8	0
Sumatra, "Anchor" per case	4	8	0

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IMPORTS of PETROLEUM into UNITED KINGDOM

Specially prepared for this Journal by the Custom House.

FOR THE WEEK ENDED 27TH MAY, 1907—

Date.	Port and Importers.	Description.	No. of Gals.	Port Whence.
May.	London—			
21	E. J. Wilkinshaw	Lub.	12,000	Philadel.
21	Wilkins, Campbell and Co.	Lub.Gr.	240	Antwerp
21	Schliemans Oil Co.	,,	5,950	Hamburg
21	,,	Lub.	1,700	,,
22	Anglo-American Oil Co.	Lamp	8,000	Philadel.
22	,,	Lub.	27,400	,,
22	A. Brown and Co.	,,	2,400	,,
23	H. Finkler and Co.	,,	5,800	Fiume
23	A. Brown and Co.	,,	2 400	Philadel.
23	Page, Son and East	,,	1,280	Antwerp
24	E. J. Wilkinshaw	,,	6,400	Philadel.
24	Trinidad Lake Asp. Pav. Co.	,,	1,200	,,
25	Anglo-American Oil Co.	,,	45,000	,,
25	Lub. and Fuel Oils, Ltd.	,,	5,000	Batoum
25	Asiatic Petroleum Co. (Romany)	Benzine	699,670	Pulo Samboe
27	Page, Son and East	Lub.	360	Antwerp
	Liverpool—			
21	Liverpool Storage Co.	,,	6,000	New York
21	,,	Lub. Gr.	16,000	,,
21	,,	M.Colza	8,000	,,
21	Crew, Levick and Co.	Lub.	920	Philadel.
21	Meade-King, Robinson & Co.	,,	4,800	Baltimore
22	C. C. Wakefield and Co.	Lub. Gr.	500	Antwerp
22	George B. Taylor	Lub.	8,400	Philadel.
22	W. B. Dick and Co.	,,	3,870	New York
23	Crew, Levick and Co.	,,	28,480	Philadel.
23	W. B. Dick and Co.	,,	16,800	,,
23	Bowring Petroleum Co.	,,	880	,,
23	Worthington and Boler	,,	6,000	,,
24	Meade-King, Robinson & Co.	,,	24,000	,,
24	Vacuum Oil Co.	,,	7,470	,,
25	Worthington and Boler	,,	800	,,
25	E. H. Kellogg and Co.	,,	2,200	New York
27	W. Gibson and Sons	Lamp	2,050	Boston
27	Anglo-American Oil Co. (Genesee)	Gas	963,360	Philadel.
	Barrow—			
21	Asiatic Petroleum Co. (Spondilus)	Naphtha	1,161,130	Singapore
	Bristol—			
23	First Anglo-Russian Oil Co.	Lub.	460	Hamburg
24	H. R. James and Sons	,,	6,600	New York
	Grimsby—			
25	J. Sutcliffe and Son	,,	480	Antwerp
	Hull—			
21	Wilsons and N.E. Railway Shipping Co	,,	8,240	,,
21	T. Wilson, Sons and Co.	,,	6,000	Boston
22	British Petroleum Co. (Kura)	Lamp	761,600	New York
22	,, ,,	Gas	115,860	,,
May.				
23	Wilsons and N.E. Railway Shipping Co.	Lub.	1,240	Antwerp
23	,, ,,	Benzine	4,000	,,
24	W. Gilyott and Co.	Lub.	27,960	New York
25	Hull & Neth. Steamship Co.	Tar oil	2,400	Rotterdam
25	Wilsons and N.E. Railway Shipping Co.	Lub.	4,000	Antwerp
25	Wilsons, Sons and Co.	,,	23,360	New York
	Manchester—			
21	Meade-King, Robinson & Co.	,,	12,600	Philadel.
21	,, ,,	M.Colza	2,000	,,
21	,, (James Brand)	Gas	1,262,500	,,
21	,,	Lub.	114,270	,,
21	Liverpool Storage Co.	,,	13,940	New York
21	Geo. B. Taylor	,,	31,200	,,
	Newcastle—			
23	Tyne-Tees S.S. Co.	,,	720	Antwerp
	Plymouth—			
21	Anglo-American Oil Co. (Suwanee)	Royal Daylight	287,620	Philadel.
21	,, ,,	Petrolite	143,730	,,
23	T. Nicolson and Co.	Lamp	120	Hamburg
	Sunderland—			
21	British Petroleum Co. (Rocklight)	,,	1,051,800	New York
	Glasgow—			
21	J. and A. Allan	Illum.	12,000	Philadel.
21	,,	Lub.	63,800	,,
22	Anchor Line	,,	7,320	New York
	Grangemouth—			
21	J. Currie and Co.	,,	2,000	Hamburg
21	,,	L. Paste	600	,,
21	,,	Lub.	15,520	,,
21	,,	Tar oil	400	,,
23	W. Graham-Yooll and Co	Lamp	1,200	,,
24	J. Currie and Co.	Lub.	480	,,
	Leith—			
23	J. Currie and Co.	,,	700	,,
23	W. Graham-Yooll and Co.	Lamp	2,090	,,
23	G. Gibson and Co.	Lub.	320	Antwerp
	Belfast—			
23	J. C. Pinkerton and Co.	,,	530	Hamburg
	Total for Week		7,074,120	

FOR THE WEEK ENDED JUNE 3RD, 1907—

Date.	Port and Importers.	Description.	No. of Gals.	Port Whence.
May.	London—			
28	London and Thames Haven Oil Wharves Co.	Spirit	37,500	Rotterdam
28	London & India Docks Co.	Benzine	100	Hamburg
29	Asiatic Petroleum Co.	Illum.	100	Rotterdam
29	T. H. Lee	Lub.	140	Hamburg
29	Schlieman's Oil Co.	,,	17,000	Philadel.
29	G. and H. Green	L.Comp.	3,330	Boston

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With WOOD or STEEL UNDERFRAMES.

Anglo-American Oil Co., Ltd.,

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Finest American Lamp Oils

WHITE ROSE

and

ROYAL DAYLIGHT.

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PACKED IN SEALED TWO GALLON CANS.

Universally used by all leading Motor Manufacturers, Motorists, Railway and Motor Bus Companies.

IN USE AND FOR SALE EVERYWHERE.

QUALITY TELLS.

To Dealers only.

DATE	PORT AND IMPORTERS.	DESCRIPTION.	NO. OF GALLS.	PORT WHENCE.
May.				
30	British Petroleum Co. (Balakani)	Gas	868,790	Kustendje
30	" "	Lamp	477,360	"
30	Millwall Dock Co.	Lub.	2,000	Riga
30	London and India Dock Co.	"	6,270	Hamburg
June.				
1	T. H. Lee	Spirit	500	Rotterdam
1	Anglo-American Oil Co. (Tioga)	Fuel	180,000	Pt. Arthur, Texas
3	" "	"	486,460	"
3	T. H. Lee	Lub.Gr.	1,070	Hamburg
3	Page, Son and East	"	240	Antwerp
3	A. Brown and Co.	Lub.	2,400	Philadel.
3	Schlieman's Oil Co.	"	5,600	"
3	Consolidated Petroleum Co. (Terek)	Lamp	462,400	Batoum
May.	LIVERPOOL—			
28	Meade-King, Robinson & Co.	M.Lub.	4,800	Philadel.
28	Pickford's	"	250	Hamburg
28	"	L.Paste	740	"
29	Valvoline Oil Co.	M.Lub.	10,660	New York
30	W. B. Dick and Co.	Lub.	9,200	Philadel.
30	Vacuum Oil Co.	"	30,800	Philadel.
30	Meade-King, Robinson & Co.	M.Lub.	11,600	"
30	Crew, Levick and Co.	"	14,450	"
31	G. B. Taylor	"	400	N. Orleans
31	W. B. Dick and Co.	Lub.	8,340	Philadel.
31	Worthington and Boler	M.Lub.	4,000	"
31	A. Hopps and Sons	"	20,000	Newp't Nws.
June.				
1	Meade-King, Robinson & Co.	"	36,000	Philadel.
1	"	"	7,200	Baltimore
3	Pickfords	"	150	Hamburg
3	"	L. Paste	100	"
3	A. Hopps and Sons	M.Colza	4,350	Baltimore
3	E. H. Kellogg and Co.	Lub.	400	New York
3	Anglo-American Oil Co. (Potomac)	Lamp	786,220	"
May.	BRISTOL—			
28	Pritchard and Co.	Lub.	540	Hamburg
28	Pickford's, Ltd.	L. Paste	320	"
28	Heaton and Co.	Lub.	400	Antwerp
28	W. G. Clarke	"	470	"
31	Stocks and Son	"	2,080	Hamburg
31	Pickfords, Ltd.	"	860	"
31	First Anglo-Russian Oil Co.	"	5,440	New York
June.				
3	W. Smith and Co.	"	27,400	"
3	H. R. James and Sons	"	24,000	"
3	"	M Colza	1,000	"
May.	GOOLE—			
30	Goole Steam Shipping Co.	M.Lub.	160	Antwerp
	GRIMSBY—			
28	J. Sutcliffe and Son	Lub.	40	Hamburg
28	"	"	40	Antwerp
	CARDIFF—			
28	Homelight Oil Co. (Herindine)	Lamp	945,000	Batoum
	HULL—			
28	Wilsons and N.E. Railway Shipping Co.	Lub.	60	Hamburg
29	Anglo-American Oil Co. (Suwanee)	Lamp	431,350	Philadel.
29	" "	Gas	125,870	"
May.				
30	T. Wilson, Sons and Co.	Lub.	120	Gothenburg
30	Wilsons and N.E. Railway Shipping Co.	"	4,280	Antwerp
31	T. Wilson, Sons and Co.	"	18,920	New York
31	Hull & Netherlands S.S. Co.	Tar Oil	2,400	Rotterdam
June.				
3	C. Winschnegel and Co.	"	240	Libau
3	Wilsons and N.E. Railway Shipping Co.	Lub.	320	Antwerp
May.	MANCHESTER—			
28	D. Currie and Co.	M.Lub.	2,000	Hamburg
28	Geo. B. Taylor	"	160	"
28	J. T. Fletcher and Co.	"	520	Antwerp
30	Liverpool Storage Co.	Lub.	6,600	New York
30	George B. Taylor	"	79,400	"
30	W. Hodgson and Co.	"	1,190	"
30	"	"	8,880	Riga
June.				
1	J. T. Fletcher and Co.	M.Lub.	650	Antwerp
	MIDDLESBRO'—			
1	J. J. Sutherland	"	840	"
May.	NEWCASTLE—			
28	Tyne-Tees Steamship Co.	Lub.	1,280	"
June.				
1	"	"	1,760	"
1	"	"	160	Hamburg
May.	SOUTHAMPTON—			
29	Barringer and Son (Terek)	Illum.	952,000	Batoum
29	"	Benzine	650	"
30	"	"	4,000	"
30	"	C.Naph.	200	"
30	"	Lub.	600	"
30	American Line	"	600	New York
30	"	"	400	"
	ABERDEEN—			
28	R. Connon, Reid and Co.	Lub.Gr.	80	Hamburg
	GLASGOW—			
29	Clyde Shipping Co.	M.Lub.	160	Antwerp
	GRANGEMOUTH—			
28	J. Currie and Co.	Tar oil	400	Hamburg
June.				
3	"	Lub.	6,200	"
3	W. Graham-Yooll and Co.	Lamp	800	"
May.	LEITH—			
28	J. Currie and Co.	Lub.	350	"
30	W. Graham-Yooll and Co.	Illum.	2,580	"
31	Henderson and McIntosh	Lub.	53,280	Philadel.
June.				
1	J. Currie and Co.	"	880	Hamburg
May.	CORK—			
28	Palgrave, Murphy and Co.	"	160	"
			6,219,010	
	Add to Correct :—			
	BARROW—.			
21/5	Asiatic Pet. Co. (Spondilus)	Naph.	1,350	Singapore
	BELFAST—			
9/5	British Pet. Co. (Caucasian)	Gas	11,220	New York
	Deduct to Correct ;—			
	BELFAST—			
9/5	British Pet. Co. (Caucasian)	Lamp	2,190	"
	Total for Week		6,229,390	
	Total for the Fortnight		13,303,510	

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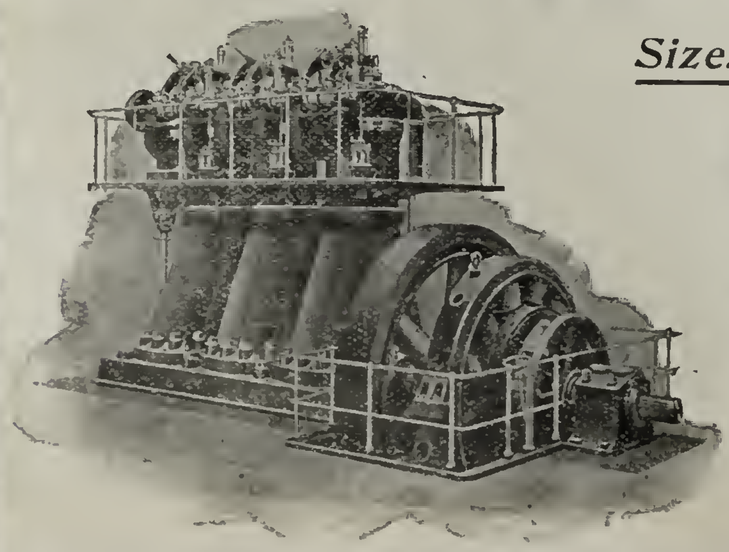

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The Petroleum Review.

By PAUL DVORKOVITZ.

Vol. XVI. *(New Series.)* June 22nd, 1907. No. 401.

Editorial Notes.

Coalite and Coaline. By reason of ingeniously planned advertisements in the daily press during the past week or two, we have all become acquainted with Coalite and Coaline. It is placed on record that those who throw mud find that sometimes a little is bound to stick, and following upon the same line of reasoning, we believe that experience will prove that the suggested boom in Coalite will end in "smoke." But it is with regard to the bye-product—Coaline – that we would especially speak. This is a competitive age, and so long as competitors play the straight, honest game, they are always welcome in the field. When, however, they go out of their way to commend their special product by condemning another, then comes the time for plain speaking, and our candid opinion is that whatever successful future there might have been in store for the new motor spirit—Coaline—that has been turned into failure by the unscrupulous manner in which the advent of this new spirit has been heralded. There is a point beyond which the British public cannot be gulled, and we have every reason to believe that that limit has been exceeded in the present instance.

Coalite and "Cod." A most cursory analysis of the arguments used by the promoters of the company why coaline should rapidly replace the present-day motor spirit, cannot be said to inspire one with confidence. It is very amusing to learn that "the largest proportion of petrol comes to us from America," when as a matter of fact, out of 27,000,000 gallons of spirit imported into this country last year, only 8,000,000 came from the United States. Then it is also consoling to find that if only the motor industry goes over to use nothing but "Coaline" the motorist will no longer be at the mercy of any "irresponsible Trust." Here is a company arranging for the production of a quantity of motor spirit "far more than sufficient to meet the whole of the present demand," and yet suggesting that in this way will the user be "free from the dictation of the Trusts." The argument is absurd, for not throughout the whole of America can a commercial organisation be found which has a policy more monopolistic in its essential principles than is the case of the British Coalite Co., Ltd. It is common knowledge ledge that there is the greatest possible competition from all quarters in the supply of petrol for the British motorist, and so to talk of monopoly in the production of petrol is to wilfully distort facts. Look at coalite and coaline as one will, they are both inseparably associated with "C-O-D." even in the spelling of their respective names.

Affairs at Baku. In strange contrast to the highly imaginative writings of some of our daily press correspondents is the present state of affairs at Baku. The strike of the sailors is over, and work has been resumed in thorough earnest, as is shewn by the most recent deliveries from Baku, while at the oil fields themselves, though of course there is always present that lack of confidence in the future, there is nothing which renders the outlook gloomy. Production is on the increase, the refineries are exceptionally active, and oil shipments to the Interior are proceeding with much energy. During the past few days we have noticed many purely imaginative paragraphs in the press relating to the petroleum outlook in Russia, but none with more interest than that which appeared in the *Financial News* the other day dealing with the subject, and it would indeed be difficult to write a news paragraph giving more misleading information than the one referred to. Why Paris should be the headquarters for the dissemination of information relating to the petroleum situation in Russia passes our comprehension.

The Galician Petroleum Export Trade. Notwithstanding the favourable reception accorded by the Galician export refiners to the proposal to renew the commission agreements with the Olex Co. for the export of Galician oils, this has been rendered impossible owing to the difficulties which have arisen over the supply of crude oil consequent upon the dissolution of the refiners' cartel. In order to ensure continuity in the export arrangements the firms forming part of the Olex Co. have been compelled to transform the latter into an oil buying and selling concern, and conclude contracts for the definite purchase of oils for export purposes. Provided therefore that no other developments take place, the Olex Co. will become an independent export company, retaining its important position in the Austrian petroleum export trade. The only difference will be that instead of selling the oils abroad on commission for the account of the Austro-Hungarian refiners, the Olex Co. will now buy from the refiners and sell for its own account, the refiners apparently being averse to exporting for themselves. This new development is of importance, inasmuch as the Olex Co., now being an independent export concern, will be able to carry on its operations with greater steadiness and determination. It is further important as an indication that the system of sale on commission is losing favour in the Austro-Hungarian petroleum trade. The Petrolea Co., which is the organisation for selling on commission the bulk of the Galician crude oil, has also been far from a complete success, and it seems that a change of system there after the manner now affected in the export organisation, might lead to a greater stability in the Galician petroleum industry.

May in the American Fields. The general aspects of the American petroleum situation underwent no change during May. Although the field operations again made decided gains, the production of high grade oil underwent further decreases, the strenuous efforts put forward to discover new productive territories being decidedly damped by the results. But while the rewards of the Eastern operators have been light during the month the efforts of the operators in the Mid-Continental and the Californian fields have been attended with extraordinary results, and the producers in these sections have been acquiring prosperity with wonderful rapidity. With the betterment of the transportation facilities in the Mid-Continent fields, things are decidedly looking up, and it is very gratifying to note that the 36,000 barrels of new production during May, thanks to the increased facilities, did not go to increase the already large stocks, while in California the outlook is now exceedingly reassuring. But, as we have said, in the Pennsylvanian fields, the new developments are very disappointing, and during the past month nearly three times as many wells have been abandoned as were completed.

THE TIN PLATE MARKET.

Messrs. Norton, Owen & Co., of 4, Bishopsgate Street Within, London, E.C., report under date 20th June, 1907, as follows:—

The market is quiet at present, which is not surprising after the heavy buying of the past few weeks, but prices are unchanged and firm, as below. The position from the makers' point of view is still quite satisfactory, as with well-filled order books they are able to look forward to their mills being fully employed for some months ahead, and consequently there is no anxiety to sell. The exports, particulars of which we give below, continue to be very heavy.

IC	18¾ × 14	124 sheets	110 lbs.	15/7½ to 15/9 per box.
IC	19¼ × 14	120 ,,	110 ,,	15/7½ to 15/9 ,,
IC	20 × 10	225 ,,	156 ,,	21/9 to 22/- ,,

F.o.b. Wales. Tin lining and iron hooping extra.

EXPORTS OF TIN PLATES.

			Five Months ended	
	May, 1906.	May, 1907.	May 31, 1906.	May 31, 1907.
Russia	165	106	435	3,404
Germany..	2,416	3,664	12,379	17,679
Holland	1,724	2,679	12,924	12,128
Belgium	1,455	684	5,913	3.308
France	2,720	3,174	10,142	11,650
Portugal	1,005	982	4,356	4,085
United States	5,523	6,222	20,582	28,432
British East Indies ..	3,992	4,912	23,024	24.552
Australia	459	801	6,845	5,890
Canada	1,311	1,613	5,171	8,085
Other Countries.. ..	8,821	10,442	50,971	53,274
Total tons ..	29,591	35,279	152,742	172,487

BOUND FOR EGYPT.

Mr. John Josh, of Petrolia, Canada, passed through London recently *en route* for Egypt, where he is preparing the way for extensive operations for oil on behalf of a London syndicate. Mr. Josh has had extensive experience in the East, and also in Columbia, South America, and is one of the Canadian boys who have made the Canadian system of drilling famous throughout the world. Mr. Josh may be depended upon to give a good account of himself in the territory to which he has now gone.

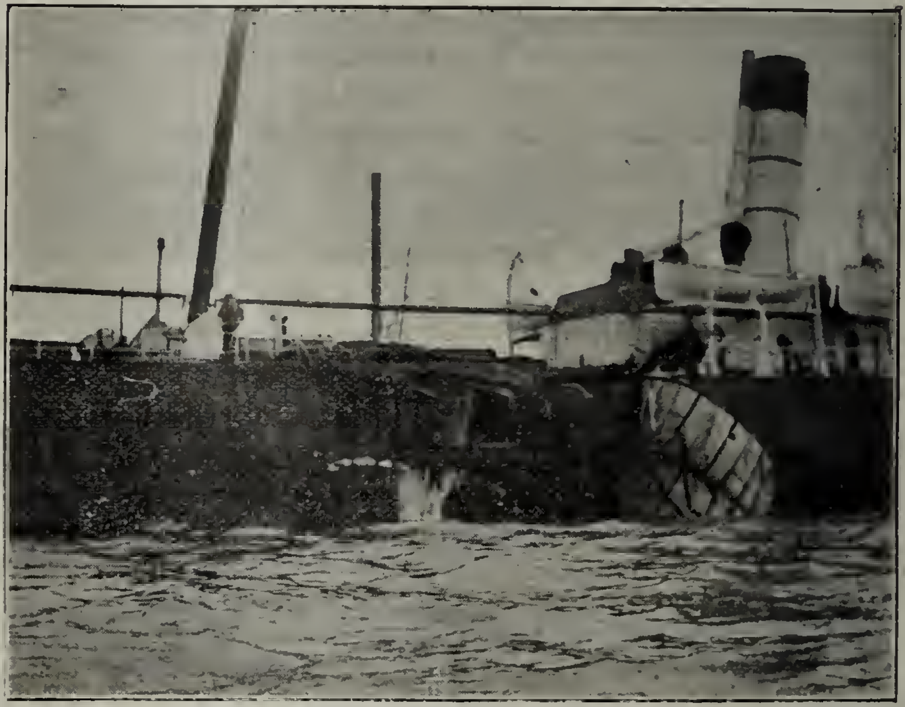
◆

Correction.—In our last issue we announced in our of return the petroleum imports supplied by the Custom House authorities that 37,500 gallons of petroleum spirit had been imported into London by the London and Thames Haven Oil Wharves, Ltd. This was a mistake, for the importers of this spirit were Messrs. Carless, Capel and Leonard. We regret this inaccuracy and have written the Custom House Statistical Office suggesting that in future greater care should be exercised in the compilation of these details.

SERIOUS ACCIDENT TO THE OIL TANKER "TURBO."

Oil tankers have of late been coming in for more than their fair share of disasters. Last week the tank steamer "Turbo," while bound for Hamburg with a cargo, came into collision with the White Star liner "Medic" off the South Foreland.

The "Turbo" sustained great damage, the hole in her side being quite 50 feet in length. The "Turbo" put into Thames Haven, at which place the photographs here given were taken by Mr. R. J. Eastabrook, jun.



SERIOUS FIRE IN THE BORYSLAW-TUSTANOWICE FIELD.

A remarkable catastrophe (caused by a thunderbolt) recently occurred in the Boryslaw-Tustanowice field, resulting in the destruction of 12 derricks. About 3.30 in the afternoon on Sunday, May 26th, a ball of lightning was seen moving from Tustanowice in the direction of Boryslaw. It had the appearance of a column of fire, and struck a telegraph pole on the Boryslaw road towards Wolanka. A terrific crash followed, the telegraph pole was shattered to fragments, and the lightning then divided into small streaks which struck twelve derricks over an area of one to two kilometres and set them on fire. The destroyed derricks were:—A, Tustanowice: the Stetta, Rosa, Cecilia, and one well of the Karpathen Co.; in Boryslaw: one of the Trzebinia Co., the Nadzieja well of Messrs. Lukawiecki and Co., two each of the Galicia Co. and of Dr. Freund, as well as two abandoned wells at Potok. Fortunately there was no loss of life, due to the cessation of work on Sunday.

A VISIT TO THE

E. W. Bliss Company's New Paris Works.

THE HOME OF PETROLEUM CAN MACHINERY.

(*By Our Special Commissioner.*)

It is only a few years since the well-known firm of E. W. Bliss Company of New York, the pioneers of petroleum can machinery, came to the decision that it was far preferable that their English and Continental customers should be catered for from Paris rather than that they should have to put up with those long delays inseparable from carrying out contracts several thousands of miles away. Thus it was that works were erected at Clichy of a size that at that time were more than sufficient to serve the purposes for which they were built.

But the intervening years have wrought great changes —very satisfactory changes they must be—for the Clichy works have for some time proved to be far too small to meet the constantly growing requirements from the *clientele* spread over the eastern hemisphere. It has therefore come about that new works of considerably larger dimensions have had to be built on the outskirts of Paris, and in this direction it says much for the indomitable perseverance of the company's European managing director—Mr. A. Wilzin—that such a fine site as that running parallel with the St. Ouen race course in the Boulevard Victor-Hugo, St. Ouen, was so expeditiously secured.

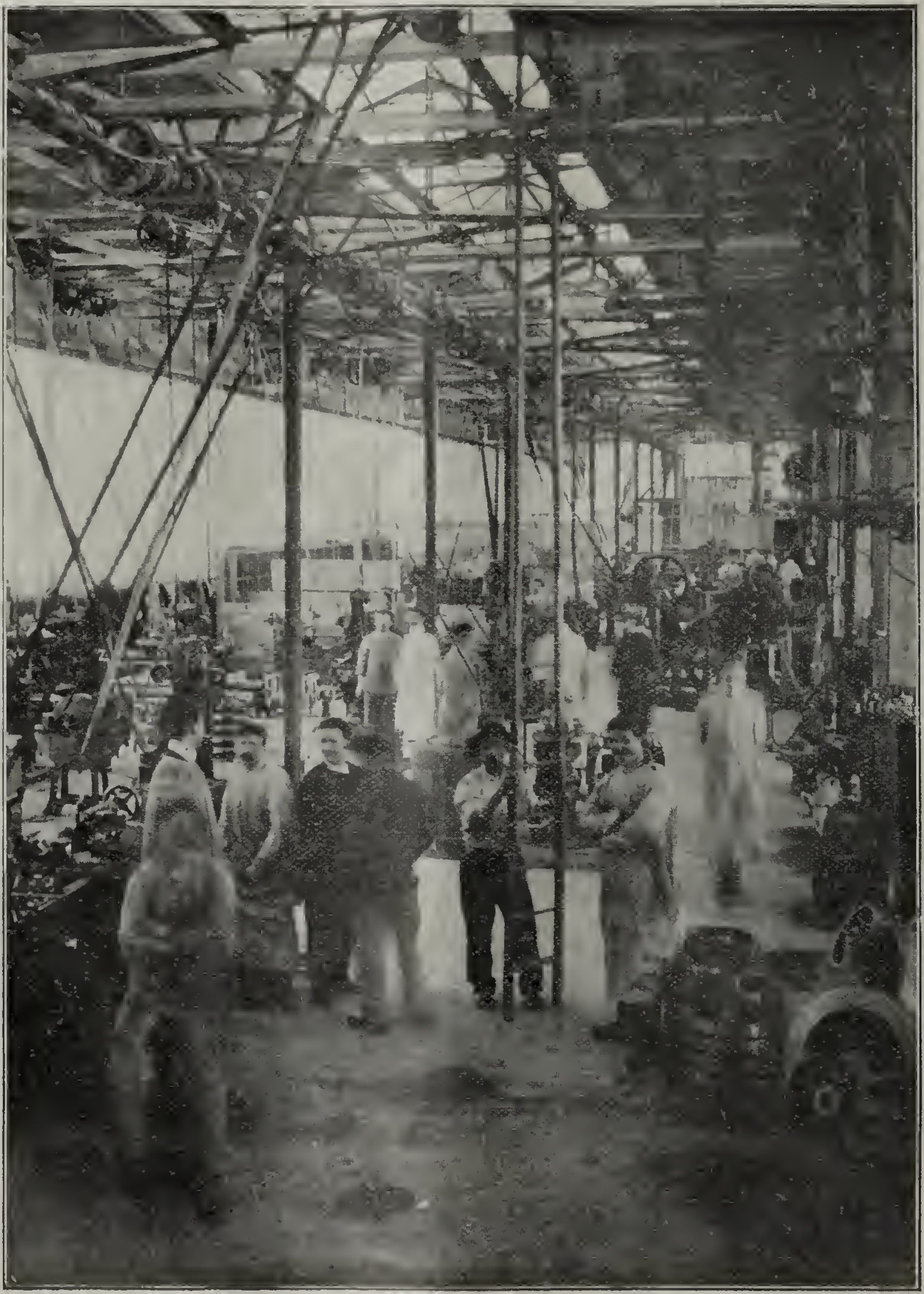
View from Boulevard Victor-Hugo.

The new spacious works have, therefore, been erected in order that the company's manufacturing facilities in Europe might be extended so as to enable them to furnish dies and special apparatus more expeditiously to those of their customers located in the European countries, or those who can be more quickly reached by the shipping facilities from Europe than America, as for instance, India, China and Africa.

The photographs which we publish in this article of the various departments in the new establishment at St. Ouen afford a very comprehensive idea of the pretensions of the new works, but so rapidly is the business of the European centre growing, that almost before the whole of the special machinery is in its place in its new home, arrangements are on foot for increasing the capacity of the works two-fold, so that there will be ample room for not only the manufacturing of the machinery with which the name of the E. W. Bliss Company is associated, but for all their modern plant to be seen by intending purchasers actually at work.

The ground surface covered by the new works at St. Ouen is about 5,000 square yards. The general offices and the various reception rooms, as will be seen from the first photograph, occupy the two-storey building overlooking the Boulevard Victor-Hugo, the whole of the works lying to the rear. The fitting and erecting shops are built at the rear of the general offices, and extend a considerable distance away from the main road, these being separated by a thoroughfare from the St. Ouen race course. Considerable ingenuity has been brought to bear in regard to the arrangements in both these departments, and, as will be noted from the photographs, they receive a plentiful supply of light not only from the roof, but also the sides of the building. In view of the delicate character of the work which takes place in these shops day by day, both in the manufacturing and fitting of the various machines, two essential and fundamental points have to be always borne in mind—the workers must of necessity be men most skilled in mechanics, while for the proper carrying out of their work, they must have as much light as possible. In both these matters, it goes almost without saying, the E. W. Bliss firm are in the most fortunate position.

At the rear of the buildings already referred to is the power house, and forging department, in the former of which the power is generated for the electric light, and the requirements of the numberless machines which are continuouly at work in the fitting and erecting shops. Here again the future has been kept well in mind, for sufficient additional ground has been secured to enable the carrying out of most extensive arrangements, should a second extension to these new works be at any time necessary.



A Portion of the Fitting Department.

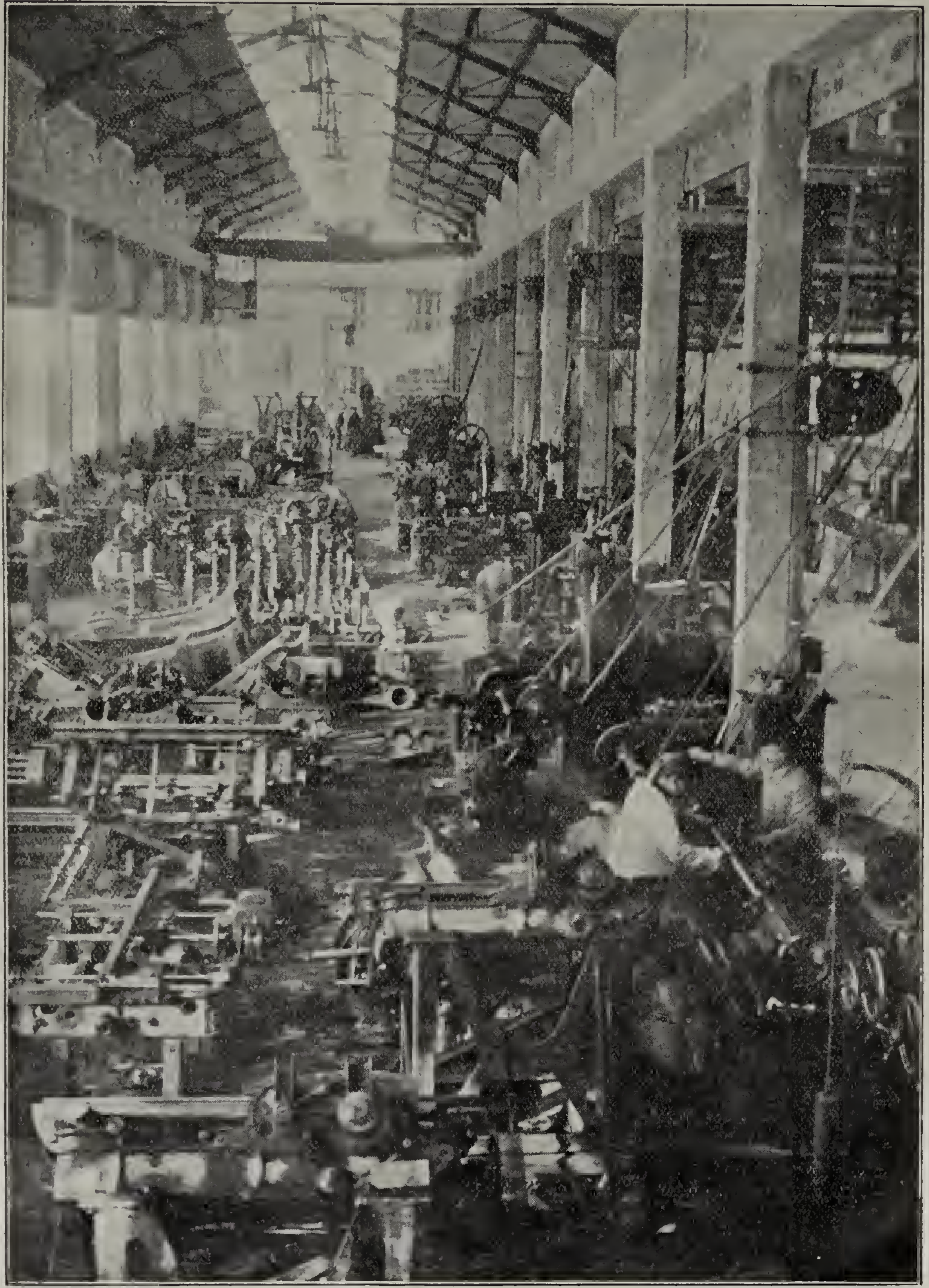
As most of the readers of the Review are well aware, Mr. A. Wilzin, the well-known expert in stamping machinery is in charge of the management of the concern, and it is only fair here to state that it is due to the wonderful amount of ability he has brought to bear upon his work, that the European firm of E. W. Bliss has achieved such phenomenal success. Mr. Wilzin has invented many new processes which aim at greater perfection in construction and working of the machines, while recently he has put into practice many of his new inventions which will, to a great extent, modify many of the now well known processes of manufacturing petroleum cans.

One point which we would particularly emphasise in this article is that the St. Ouen establishment of the E. W. Bliss Co. is so thoroughly equipped with a competent staff for the making of estimates and giving all kinds of mechanical and tecknical advice, that all technical correspondence will be greatly facilitated by being directed to that office.

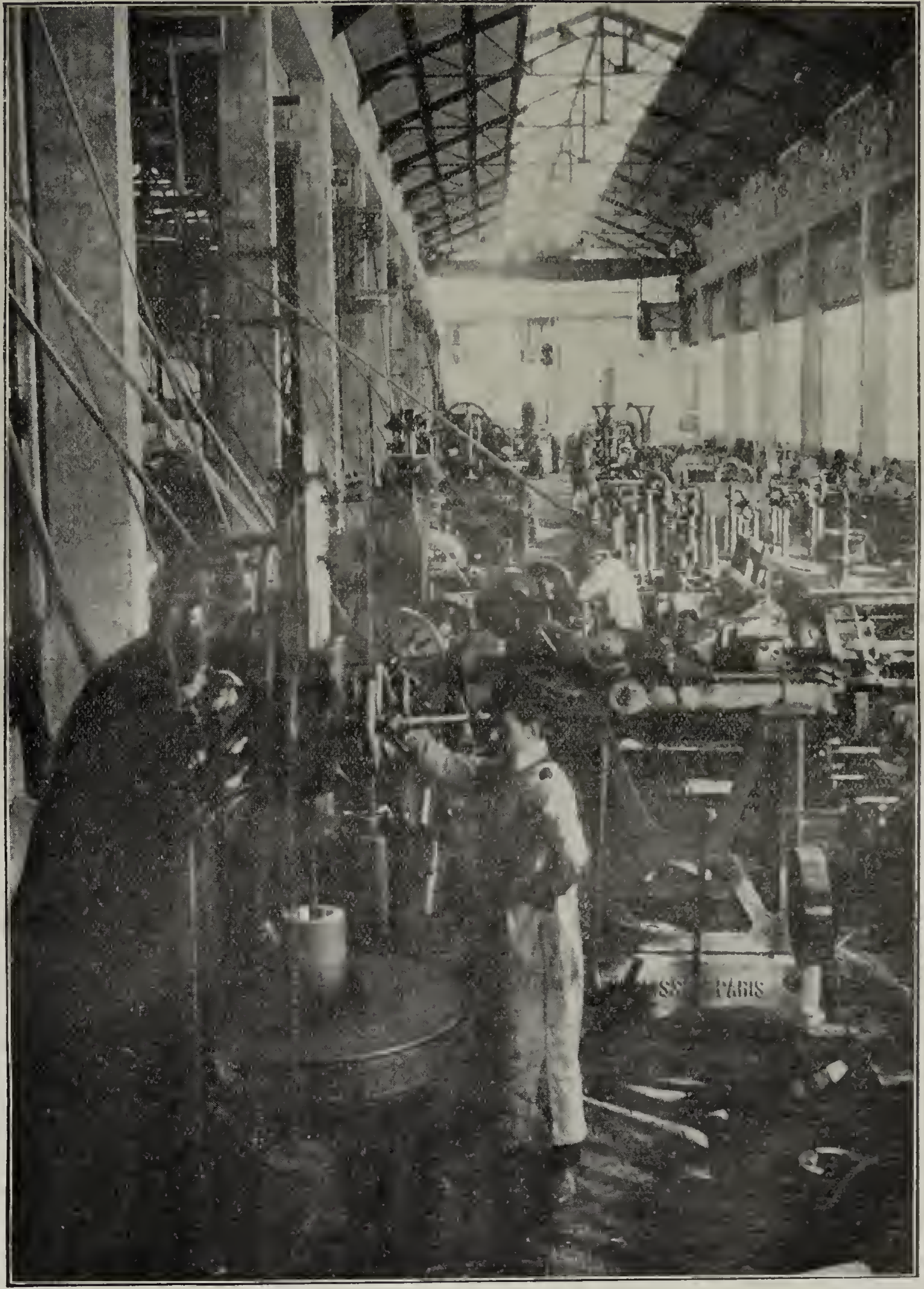
Having said so much of the new works at St. Ouen, Paris, it only remains for us to congratulate Mr. Wilzin upon the remarkable success which has followed his efforts in building up such extensive business relations with almost the whole of the world—efforts which are seen in the wonderful record of progress achieved in the old works at Clichy, and which is most assuredly in store for the more spacious manufactory at St. Ouen.

[In order to give our readers an idea of the state of perfection now reached in the machines made by the E. W. Bliss Company for the manufacture of petroleum cans, we will deal with this subject in our next issue.—Ed. *P.R.*]

THE E. W. BLISS COMPANY'S PARIS WORKS.



The Fitting Shop.



The Erecting Department.

THE WEST GALICIAN OIL FIELDS.

In its latest issue, *Naphta* publishes a number of details concerning the position in the West Galician oil fields. It points out that at Tarnawa-Dolne, in the Lisko district, the Schodnica Co. has six boreholes in the course of drilling, now at depths between 560 and 1,200 metres, and seven wells, 650 to 760 metres, in pumping, and yielding about 1,000 tons per month. It is characteristic of this field that the newly-drilled wells draw off the oil from the old wells. Two kinds of crude oil are obtained, one containing paraffin and having a specific gravity of 0·895, and another rich in benzine and of a specific gravity of 0·840. There are on the property several large iron storage tanks of a total capacity of 13,350 tons, and a railway siding for loading waggons. The deepest well—No. 9—is 1,200 metres deep. At a depth of 778 metres it yielded the first oil to the extent of 25 tons daily, and produced altogether 8,000 tons. The same company is also drilling a well at Huzela, which has reached a depth of 480 metres, and has shewn traces of oil.

At Zagorz, in the Sanok district, the following firms are operating:—The Schodnica Co., Messrs. Breitenwald and Lepkowski, Messrs. Simche, Diller and Co. and Baron Reade. The Schodnica Co. has two wells in drilling which are now 335 and 330 metres deep, and are baling four wells, which from depths ranging between 540 and 750 metres yield about 300 tons per month. The company has its own pipe line 4 kilometres long, through which the oil from this property is pumped into the company's tanks at Tarnawa-Dolne. Messrs. Breitenwald and Lepkowski have brought their well down to 385 metres, at 350 metres oil was first struck, and a quantity of 60 tons was obtained in one flow, which was used as fuel. Messrs. Simche, Diller and Co. are drilling a well, which has now reached 520 metres, and which at 700 metres produced 40 tons. Baron Reade has for the present stopped work on his borehole – at 380 metres. This well at a certain time was producing 10 tons daily. At Zagorz the crude oil is also in parts paraffinous, and in parts of a benzine nature.

Drilling is carried on at Poraz by Messrs. Laszcz, Styber and Zeitleben in a well which at 850 metres has not yet struck oil. A firm from Przemysl has a well in drilling, which is now 100 metres deep, and another in baling, which from a depth of 300 metres yields about 10 tons per month. The crude oil is also partly benzinous, and partly paraffinous.

At Zaluz there is a well being drilled by Messrs. Perutz and Co., which has not yet become productive.

At Wielopole a firm of boring contractors are drilling a well for Messrs. Freudenheim and Co., which, owing to very hard sandstone encountered, has after nine months' work reached a depth of only 189 metres. Messrs. Halmosz and Barclay are drilling two wells, now 450 and 500 metres deep respectively, and are baling four wells from a depth of 400 and 500 metres. These wells are likewise in hard sandstone. The total output is about 150 tons per month of a heavy paraffin containing oil. The Sanok Co. has at a depth of 480 metres not struck any oil yet on their well. On the Ludwig property of Messrs. Nebenzahl and Co. there are two wells in drilling (present depth 510 and 350 metres), and three wells in baling (510, 350 and 490 metres)—the total output is 25 tons per month. Messrs. Rokach and Sussmann have a well in drilling, now 620 metres deep, and one producing well, yielding 30 tons per month. The Wielopole Co. is drilling a well which at 500 metres is still unproductive.

The Hannoversch-Galizische Naphtagewerkschaft are drilling a well at Winnica and Moderowka in the Iaslo district, which is now 300 metres deep; also one at Wola Brzostecka, in the Pilzno district, 400 metres deep; and a third at Nawsce Brzosteckie, 500 metres deep – in neither of these wells has any oil been struck yet.

At Huminska, in the Brzozow district, the Galizische Naphta Productions Gesellschaft has three wells in drilling (now at depths between 300 and 600 metres), and 15 producing wells yielding from 150 to 200 tons monthly. The crude oil, which is rich in benzine, is pumped through a pipe-line, 21 kilometres long, to Rymanowka railway station. Mr. C. MacIntosh is drilling there a well, which at 500 metres has not yet struck any oil.

At Wojkowa, in the Krosno district, the Karpathen Co. are drilling a well, which has now reached 750 metres. At 180 metres the first oil stratum was struck, which yielded 30 tons daily of an oil rich in benzine, but the stratum was cased in and drilling continued.

At Zarnowiec work on Messrs. Tiegerman and Hartmann's well, 470 metres deep, is at present suspended, but is about to be resumed simultaneously with the starting of a second well.

GROSNY PETROLEUM PRODUCTION.

During the first four months of 1907 the production of crude oil at the Grosny oil fields amounted to 12,051,347 poods, of which 11,033,437 poods were obtained by baling. These results are below last year's figures. The production in April amounted to 3,256,005 poods against 2,986,501 poods in March.

The production of the leading firms in March and April was as under:—

	March. Poods.	April. Poods.
Akhverdoft Co.	1,207,500	1,401,200
Anglo-Russian Maximoft Co., Ltd.	606,400	688,300
Spies Petroleum Co., Ltd. ..	463,905	488,925
Kasbeck Syndicate, Ltd. ..	136,780	136,660
North Caucasian Oilfields, Ltd.	126,600	121,600
Russian Standard Co.	81,000	81,370
J. MacGarvey	71,166	80,939

The Akhverdoff Co. is operating on seven plots. On their plot No. 22 they have, in April, obtained 221,000 poods from spouters. The Spies Co. has obtained from spouters 156,140 poods on their plot No 32.

The number of producing wells possessed by the leading firms in April was:—Akhverdoff Co., 45; Anglo-Russian Maximoff Co., 14; Spies Co., 43; Kasbeck Syndicate, 9; North Caucasian Co., 10; Russian Standard Co., 14; J. MacGarvey, 1. Total number of producing wells 169, owned by 14 firms, on 33 plots.

In April drilling was carried on by 12 firms, on 24 plots in 35 wells; length drilled 3,052 feet. The total area covered by the wells in drilling and in exploitation is about 1,214 acres, which includes also the non-producing part of the oil fields.

Agitation continues among the workmen for economic improvements, but order is preserved, and work is carried on under normal conditions.

THE BIBI-EYBAT PETROLEUM COMPANY, LIMITED.

ANNUAL MEETING OF SHAREHOLDERS.

The annual meeting of the shareholders of the Bibi-Eybat Petroleum Co., Ltd., was held on Monday at noon at the offices of the company, Threadneedle House, E.C., the chairman—Mr. J. Annan-Bryce, M.P.—presiding.

Mr. R. M. Allan, the company's secretary, read the report of the auditors, after which the Chairman rose to propose the adoption of the report and balance-sheet, a *resumé* of which appeared in the last issue of the Review.

In doing so, the Chairman detailed several items in the accounts, after which he said :—

When I addressed you at the last general meeting I said that there were again signs of the commencement of a strike. It was hoped that this might be averted by a combination of the producers, which we did our best to effect, but, unhappily, our efforts to bring about united action were unsuccessful, and the agitation was able to fight the producers separately. They selected our company for first attack. It has been said by some persons not acquainted with the circumstances that the strike might have been avoided if we had yielded to the workmen's demands, but so exorbitant were these demands, coming upon the top of the concessions already made, that to have granted them would have been absolutely ruinous. The strike quickly spread to the properties of the other foreign companies, and eventually involved the greater part of the Baku oil field. The loss entailed on the various companies through the resulting stoppage of production and the after effects of the strike was enormous. The gross production of your properties during the year amounted to 8,678,500 poods, obtained from 22 wells during a working of 282 days—an average production per day of 30,775 poods, and per well of 1,399 poods. Since the beginning of the current year there have been no strikes, and the production is again becoming normal, having reached in the month of May the figure of 1,124,500 poods, or an average of 36,274 poods per day. As stated in the report, we have now 15 wells in process of boring, of which two have almost reached the depth at which a good production may be anticipated, and if the more favourable conditions now prevailing, which are in part due to a firmer attitude on the part of the authorities, are maintained, improved results may be expected. Your thanks are due to Mr. Mancho and the other members of your staff on the oil field for their courageous conduct under most trying circumstances. They had, indeed, the great advantage of the advice and moral support of your director, Mr. Von Ofenheim, who ran the risk of visiting the field just at the moment when the strike was at its worst in the month of July, and to him, therefore, you also owe a debt of gratitude.

When it became evident that the company was in for a serious strike which would entail a stoppage of production, your directors foresaw that the company's position would be embarrased if it were obliged to begin the redemption of its debentures in November, 1906. The debenture holders were accordingly approached, and at a meeting held in August, they were good enough to agree that the date for commencing redemption should be postponed for five years, namely, till the 1st November, 1911. The following stipulation was made by the debenture holders :—"That no dividend shall be recommended by the board to be paid out of the profits of the company available for dividend in any year prior to the year 1911, until a cumulative sum of £11,000 per annum shall have been set aside as a reserve out of the profit of preceding years, such reserve to be used at the discretion of the board in the purchase of debentures in the open market when they can be obtained at or below the price of redemption stipulated in the third of the said conditions ; and subject thereto to be invested in the names of the trustees for the debenture holders in the purchase of trustees' securities, and such reserve may be used at the discretion of the directors in or after the year 1911 in the redemption by drawings of debentures in excess of the amount mentioned in the third of the said conditions." Your directors are of opinion that this condition was reasonable under the circumstances, and your thanks are due to the debenture holders for the consideration with which they met your request for an extension of time. I conclude by moving :—"That the directors' report and the accounts for the year ended 13th January, 1907, be and the same are hereby received and adopted. I will ask Mr. Von Oienheim to second this motion.

Mr. W. Ritter Von Ofenheim, in rising to second the adoption of the report, said :—Of late, numerous letters have been sent to the different financial papers stating that it would have been possible for us to avoid the strikes by making reasonable concessions, and that it was the English companies especially who had refused the men's demands, whilst a more liberal spirit might have been expected from them. Well, I think that so unjust a criticism has rarely been passed. The demands made by the workmen were so preposterous that in the case of one single company we worked it out that the increase of wages alone, with all the accessories, would have amounted to about £100,000 a year. As you know, the companies, even without such an increase of expenses, are far from prosperous ; so that the exorbitant demands of the workmen could not be considered for a moment. Further, a committee of workmen was to be constructed with the power of dismissal or of appointing new men, and even managers. That would have meant that we should no longer have been masters in our own house. That if there had been any possibility of finishing the strike, it was to the greatest interest of your managers to do so, and that there was not much to be gained by continuing a situation in which you knew that every day your life was in danger is, I think, so evident that such criticisms—which it is rather easy to make from some safe place in London—can be at once dismissed. There was another question—namely, why the strike was only with the English companies and not with the local companies. First of all, the strike was not confined to the English companies, but comprised nearly all the Russian companies, amongst whom were the great firms of Nobels and Rothchilds. All these concerns were simultaneously involved in the strike. In the Armenian firms the workmen began to strike, but the Armenians have over the whole Caucasus a very powerful organisation. This organisation has an enormous influence on the workmen, and derives its biggest income from the workmen. As this income would have stopped if the workmen of the Armenian firms had been on strike, it was to their interest to prevent this, and at the beginning of the strike they brought great pressure to bear on the workmen and employers. They ordered the employers to pay immediately a certain bonus to the workmen, and then obtained a promise from the workmen that both parties would abide by the result of the strike which was raging against us. In consequence, the others could sit on the fence and wait for the result of the struggle with us. We on our side could not yield, because had we done so we would simply have compromised indefinitely the future of our company. The strike terminated without concessions to the workmen, and no payment was made for strike time, contrary to the custom of previous strikes. This had the beneficial effect that since then there have been no further big strikes on our properties, though the other firms, and especially local firms, have since that time had rather prolonged strikes.

You must not forget that in Russia politics are an important factor in our business, and there occurred yesterday an event which perhaps may bring some disturbing element into our work—I mean the dissolution of the Duma. Please do not suppose for a moment that we have the slightest desire to interfere with politics ; but, unfortunately, politics greatly interfere with us, and it is quite possible that some new strike may now break out. I do not anticipate that it will be of very long duration—if it occurs—because in the rest of Russia all the sensible and intelligent people have already come to the conclusion that this revolutionary movement, which has lasted all these years, has lasted too long, and is not the means by which to obtain any amelioration of conditions in Russia. Russia wants evolution, and not revolution, and I miss in the European newspapers, which are not so very well informed about Russian affairs, any reference to the fact that the Russians have now come to the conviction that it is not possible to change the constitution and the Government of a big country within a day or within a year. For instance, one cannot establish new schools before you have schoolmasters, and to have schoolmasters you must have someone to train them. The same applies to all the departments of the life of a big Empire, and, therefore, while I quite admit all the enormous sins which were committed in the past, I think the discussion of those sins does not help the future, and the past should only be taken as a guide to what should be done in the future. A re-organisation of Russia is only possible within the space of one or two generations. Naturally, this late movement affected the Baku industry all the more in that in the Caucasus the workmen are composed of different nationalities, and those who do not know how to read and write are easily carried away by agitators. If those agitators who, by holding out promises to the workmen, induce them to strike are then able to shew them some result, of course, their position is strengthened for further action, and that is why we had, as far as possible, to take a firm stand and stop this kind of agitation. We have in some way succeeded, but there is still a great amount of unrest. We have succeeded in getting a more energetic Government at Baku, which has organised the police, who previously were partly in conspiracy with the anarchists, and I am glad to say that somewhat better order is maintained in Baku now than was previously the case. A big factor, which in our company, I think, must not be under-estimated, is the great tact with which our manager and our whole staff have handled our workmen, I must say that Mr. Mancho, who is really an exceptional man—and whom I have great pleasure in calling my personal friend, apart from our business relations—has been able to make the workmen understand that he is their true friend. He is trusted and respected by the workmen, and possesses great influence over all the better elements amongst them. Besides that, speaking now specially of our own business, I am glad to tell you that I do not think there is any company which is better managed in Baku than ours. I think that in technical knowledge we are at the top of the tree. Everything is well looked after, every detail is cared for, and if only times remain peaceful I am sure that the company will in time come very close to a realisation of the promises made to you at its foundation. Our territories have proved good. During the last fortnight we have attained to a daily production of 39,000 poods, with every prospect of a further increase. We are very careful in the drilling of our wells. We cement our wells in a very thorough fashion. We do not go for rapid results, but rather in carrying out the workings of to-day we have our eyes on the future also. If only peace is maintained, I hope that next year we will be able to give you a far better account of our properties and a far better result than you have seen this year."

The motion was carried, and the retiring director and auditors having been re-elected a vote of thanks to the manager and staff at Baku concluded the proceedings.

THE PETROLEUM TRADE OF HANKOW DURING 1906.

Writing upon the trade of Hankow during 1906, Mr. Consul-General Frazer says that during the year, by arrangement between the Shell Transport and Dutch Companies, this market was supplied only with Borneo oil, the Sumatran stock being re-shipped to Shanghai. In spite of the apparent diminution in the total import, 1906 was in fact a record year for deliveries for consumption, which shew an increase of 25 per cent. over those of 1905, the next highest year. The stock at the close of the year was roughly 2,500,000 gallons, against 11,000,000 at the end of 1905, and 1907 is likely to see heavy arrivals. American and Borneo oils both did well, the former on account of quality and the latter of cheapness. Russian case oil has fallen so much out of its former favour that only 190,500 gallons were imported, and the cases of two tins were at the end of the year selling at a lower price than two tins of the cheapest American oil. Exchange enabled importers to accept lower tael prices, American bulk oil being under 3½d. per gallon, and cases of 10 gallons of "Brilliant" selling for about 5s. According to the native press an attempt is being made with the aid of Japanese experts to develop a petroleum field in Shensi.

The quantities and values of imported kerosene for the years 1905 and 1906 into Hankow were as under (in gallons):—

	1906.		1905.	
American ..	3,064,370	£70,608	9,063,870	£201,504
American bulk ..	6,573,189	£81,787	4,654,600	£71,063
Borneo	1,274,910	£22,662	912,850	£16,999
Borneo bulk ..	9,885,371	£98,919	4,927,049	£71,254
Russian ..	190,500	£3,982	644,500	£14,583
Sumatran ..	30,000	£578	650,000	£13,255

ROUMANIAN PRODUCTION IN APRIL.

According to the official statistics published in the *Moniteur du Petrole Roumain*, the total production of crude oil in the Roumanian oil fields in April amounted to 97,412 tons, against 98,385 tons in March. The figure for April is incomplete, and will be increased by the production of firms who have not yet made their returns, which will bring it up to the level of the March production.

The production of the different fields in April, compared to March, was as under:—

	March. Tons.	April. Tons.
Prahova District—		
Bustenari	41,717	39,258
Campina-Poiana	21,632	21,420
Moreni	23,180	25,039
Baicoi-Tinta	5,124	5,342
Other Fields in Prahova ..	2,252	2,340
Total for Prahova	93,905	93,399
Dambovitza District	2,930	2,666
Buzeu ,, ...	850	762
Bacau ,, ...	700	585
Total	98,385	97,412

The production of the leading firms in March and April was as under:—

	March. Tons.	April. Tons.
Steaua Romana	36,118	31,783
Regatul Roman Co.	17,559	19,720
Bustenari Co.	11,641	11,260
Romano-American Co.	4,899	6,738
Sylva Co.	3,903	4,147
International Co.	3,936	3,474
Trajan Co.	3,124	4,100
Colombia Co.	2,369	2,180
C. M. Pleyte and Co. (late Moreni Co.)	2,317	1,509
Aquila Franco-Romana	1,359	1,382
Seceleanu Bros.	1,310	1,262
Arnheemsche Petroleum Co. ..	1,014	1,016
H. F. Drader	1,132	1,397
K. Ozinga	983	844
Nafta Co.	747	736

NEW MINING REGULATIONS FOR SOUTHERN NIGERIA.

The Nigeria Bitumen Corporation, Ltd., issues a circular which among other things says:—

"The Board has received, through the courtesy of the Colonial Office, an advance copy of the New Mining Regulations (Oil) Ordinance, 1907, for the Colony of Southern Nigeria, which has received the assent of His Majesty. Previous to the passing of this Ordinance, the Mining Ordinance of the colony under which the prospecting licenses held by the company were granted was very inconvenient, and in many respects inapplicable to oil, and made operations difficult, especially for pioneers. The new Ordinance, whilst protecting the interests of the colony, places the oil industry in a much more advantageous position. Under this Ordinance the company has a period of four years from the 27th March last in which to test its areas before taking out definitive leases, whereas under the original terms such leases would have had to be taken out during the year 1908."

PROSPECTIVE PETROLEUM DEVELOPMENTS IN NEW ZEALAND.

(*From Our Own Correspondent.*)

GISBORNE, *May 7th.*

There is no doubt, as has already been pointed out in the REVIEW, that there are shortly to be large developments in the territories here in search of petroleum. So far, Taranaki holds the premier position in public confidence, but there are equally good indications on the East coast, and very good ones near Greymouth on the West coast of the South Island.

With regard to Taranaki, there have been no less than 10 different serious attempts to tap the oil field, these having been as follows:—No. 1, by an English syndicate, at the root of the breakwater, depth 915 feet; No. 2, New Plymouth and Sydney company, near No. 1 bore, 1,100 feet; No. 3, New Plymouth Petroleum Co., on Mr. Mace's farm, Herekawe, 1,534 feet; No. 4, New Plymouth Petroleum Co., near Mr. Honeyfield's house, breakwater, 1,976 feet; No. 5, New Plymouth Petroleum Co., Putt's farm, 2,050 feet; No. 6, New Plymouth Petroleum Co., Okey's farm, 302 feet; No. 7, New Plymouth Petroleum Co., Veale's farm, 1,220 feet; Taranaki Petroleum Co., same bore continued to 1,335 feet; No. 8, Taranaki Petroleum Co., Honeyfield's farm, upper end 2,052 feet; No. 9, Taranaki Petroleum Co., Honeyfield's farm, near No. 3 bore, 1,055 feet; No. 10, the present bore. Boring started in May, 1904. Adelaide syndicate at first were interested, and after liquidation a New Plymouth company (the present one) took it up. Present depth, 2,310 feet.

Professor Easterfield's analysis of Taranaki petroleum shews the following:—Distillation test, benzine 20 per cent., burning oil 40, lubricating oil 37, pitch 2, loss 1 per cent., total 100 per cent. Crude benzine, re-distilled, yielded 66 per cent. of naphtha. The kerosene is of greater density than white rose oil, and shews a greater tendency to smoke when burning in American lamps. The heavy oil is a good lubricant.

The latest information regarding the Taranaki Petroleum Co. shews that their bores stand as follows:

No. 1 (Birthday well)—This well struck oil in April, 1906, and was then shut down pending completion of other wells and erection of storage tanks, etc. Occasionally it has been let run for a short time, but not long enough to keep same clear. It becoming plugged by the presence of deposited paraffin, etc., arrangements were made to commence cleaning it out on Monday, 6th May, 1907. Oil struck 2,322 feet.

No. 2 well is situated a short distance from No. 1, and is now being drilled under the direction of Mr. O. Dowd, who was placed in charge after Mr. Fair's death. In this well considerable trouble has been met and overcome in connection with the casing. The present depth of drilling is 1,938 feet, with good shows of oil at the present time. Considering the depth, it is expected that oil will be struck about the same as in No. 1 well.

No. 3—This is an old well formerly sunk under the direction of Mr. Oliver Samuels, of New Plymouth. Oil was found about 2,000 feet, and then the derrick was burnt down, and the hole abandoned. Since the striking of oil in No. 1 well, this bore has been cleaned out to a depth of 1,615 feet, and work is still in progress and giving good signs of oil and gas. When sunk to 2,300 feet, this should help to prove the possibilities of a larger area of country. The above three wells are in a direct line, covering a distance of about a quarter-of-a-mile.

No. 4 well is the latest, and is down 744 feet, this well forming a triangle between Nos. 1 and 2 wells. All the wells are being sunk with Canadian rigs.

It might here be mentioned that some time ago, the Taranaki Petroleum Co. wrote to Messrs. A. F. Craig and Co., of Paisley, Scotland, for quotations for a refining plant, and at the same time forwarded several barrels of crude petroleum, and the reply which Messrs. Craig have sent is worthy of giving here. They say;—"The oil is of exceptional quality—in fact, it is the most superior we have examined. There might be a market in this country for such an oil, but as it would have to be dealt with by different methods than those in use in Scotch oil works, it is not likely that any of the Scotch oil companies would care to take it in. We are now sending you samples of the products, which you will see are exceptionally fine."

At present there are six companies formed to work New Plymouth at the Taranaki fields, in addition to four or five strong syndicates, but, so far, in Gisborne we have only one company, although I hear that another is about to register. The Gisborne Oil Co. has now been in existence about one year, having been formed in May, 1906. This company has delayed operations, endeavouring to obtain the services of Dr. Bell, the Government geologist, to make a detailed survey of the district, and locate a spot likely to be favourable for the commencing of boring operations. From what I know, however, there seems little chance of Dr. Bell being sent here, at least just for the present, for it is reported that he is about to leave on a trip to Canada. This company holds some 26,000 acres of country upon which there are surface indications of oil. The moving spirit in the concern is Mr. W. D. Lysnar, of Gisborne, but few, if any, of those interested have any knowledge of oil matters.

As I have already mentioned, another company is about to register, and this is the Hutchinson Syndicate, prompted by Mr. Geo. Hutchinson, ex-Member of the House of Representatives for Patea. This company holds options over some 20,000 acres in several parts of likely oil-bearing country. These options were inspected a few months ago by Mr. Frank A. Rich, B.Sc., M.I.M.E., who, I believe, was very well pleased with the indications for future successful development. I am given to understand that it is proposed to float these options either on the Colonial or English market, though possibly the latter. During Mr. Rich's tour through the various territory, I acted as his guide, and consider that no person has made so complete an inspectien of the various areas as this gentleman. In many places the surface indications as to the presence of oil are most pronounced, and the opinion of those who have given serious consideration to the matter is that considerable success will follow developments, especially in the Gisborne district.

WILLIAM E. AKROYD.

MAY IN THE AMERICAN FIELDS.

The May operations in the American fields resulted in the general position and outlook being unchanged. Disappointment still continues to face the Pennsylvania operators, but so far as the Californian and Mid-Continent fields are concerned, the results achieved are most satisfactory.

In the sections producing high-grade oil, which include the petroleum regions of Pennsylvania, New York, West Virginia and South-eastern Ohio, there were 662 wells completed during the past month, including 43 gas wells and 125 dry holes, and the new production amounted to 3,893 barrels. The 494 wells completed in May averaged a little less than eight barrels, while 360 in April averaged 10 barrels each.

On May 31st the Pennsylvania oil regions contained 277 rigs and 445 drilling wells, which was an increase of 43 rigs and 49 wells drilling over the figures for the last of April.

In the Buckeye oil field of North-western Ohio only 76 wells were completed during the month, and eight of these were dry; the new production was 687 barrels, which was a little over 10 barrels to the well. This is a decline from April of eight wells completed, 12 barrels new production and 18 dry holes.

On the last of May there were 70 rigs and 64 wells drilling under way in the Buckeye oil fields, which was a gain of five rigs and two wells drilling over the April figures. Developments have reached a very low point in the Buckeye oil fields.

Only 57 new wells were completed in the Hoosier oil fields during May, and of these 12 were dusters. At the same time 196 old wells were abandoned. The new production amounted to 625 barrels. Compared with April this represented an increase of seven wells completed and 245 barrels new production, while the dry holes were a stand-off. Fifty wells were completed in the Indiana oil fields in April, including 12 dry holes, and the new production was only 380 barrels. This was an all-round decrease from March of 19 wells, 186 barrels production and two dry holes. In May, 1905, 200 new wells were completed in the Indiana oil fields.

At the end of the month there were 59 rigs and 78 wells drilling under way in the Indiana oil fields, which was a gain of one rig and one drilling well over the figures for April 30th.

Tennessee has dropped out as a factor in the country's supply of crude petroleum, and the new developments connected with the pipe line system are confined almost entirely to Kentucky. Eighteen wells were completed in May, of which six were dry, and the new production amounted to 141 barrels This was a decline of one well and 163 barrels production from the April figures, with a gain of two dry holes. These wells were all within the defined limits of Wayne and Wolfe counties in Kentucky. In active operations the Kentucky oil fields reveal few changes from month to month. On May 31st, 12 rigs and 21 wells drilling were under way, the exact counterpart of the figures for March 31st.

Activity in operations in the Mid-Continent oil fields during May increased the quantity of oil by more than 15,000 barrels a day, the total new production for the month reaching the excessive figures of 52,245 barrels. There were 58 fewer wells completed in Kansas and Oklahoma during May than in April, but the Glenn district was responsible for the increase by completing 116 wells as against 80 in April, doubling its new production. May reporting 33,515 barrels and April 16,605 barrels. The Bartlesville district of the Cherokee reported 10,117 barrels in May and 10,880 barrels in April. The Osage reservation shewed an increase of 1,000 barrels a day, but all other districts reported decreases. The average production per well for the entire field was 164 barrels. In new work all districts except the shallow sand belt shew a decrease, with one more drilling well in sight on May 25th than on April 25th, and 62 less rigs up. May was a phenomenal month in the Oklahoma fields and is quite likely to remain the banner month of the year in quantity of new oil produced.

◆

MOVEMENTS OF PETROLEUM PRODUCTS IN HOLLAND.

The movements of petroleum products in Amsterdam and Rotterdam during May were as under :—

	Amsterdam. Barrels.	Rotterdam. Barrels.
Stock on 1st May	19,425	41,468
Imports in May	74,242	218,600
Deliveries in May	55,644	168,824
Stocks on 31st May	28,022	91,244

CLASSIFIED IMPORTS INTO UNITED KINGDOM UP TO JUNE 17th, 1907.

IN GALLONS.

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Country.	Illuminating.		Lubricating.		Residuals.		Gas Oil. (Solar)		Benzine.		Fuel Oil.		Other Descriptions.		Totals.	
	Since June 3.	From Jan. 1.	Since June 3.	From Jan. 1.	Since June 3.	From Jan 1.	Since June 3.	From Jan 1.	Since June 3.	From Jan. 1.	Since June 3.	From Jan. 1.	Since June 3.	From Jan. 1.	Since June 3.	From Jan. 1.
Austria ...	—	—	—	67,440	—	67,770	—	—	—	—	—	—	—	--	—	135,210
Belgium ...	—	153,410	22,230	275,320	—	—	—	310	—	4,000	—	—	—	590	22,230	433,630
Canada ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	--
Dutch India.	—	—	—	—	—	—	—	—	—	9,843,910	—	—	—	—	—	9,843,910
Germany ...	16,420	1,154,440	50,980	703,710	—	2,000	—	—	—	80	—	—	—	3,100	67,400	1,863,330
Holland ...	—	1,020	5,000	9,710	—	—	—	—	56,000	340,530	—	—	17,400	75,930	78,400	427,190
Roumania ...	—	4,138,170	—	—	—	—	—	2,832,790	—	1,459,000	—	238,700	—	—	—	8,668,660
Russia ...	1,962,520	16,934,260	783,700	2,887,130	—	—	—	—	—	7,250	—	—	—	360	2,746,220	19,829,000
U.S.A. ...	4,816,370	43,964,490	778,495	17,113,835	—	448,690	1,009,230	24,216,550	—	2,420,420	943,190	2,941,650	29,860	840,810	7,577,145	91,946,445
Other Countries	—	950	10,180	27,050	—	—	—	—	—	2,500	—	40	—	840	10,180	31,380
	6,795,310	66,346,740	1,650,585	21,084,195	—	518,460	1,009,230	27,049,650	56,000	14,077,690	943,190	3,180,390	47,260	921,630	10,501,575	133,178,755

LATEST BAKU AND BATOUM NEWS.

BATOUM PETROLEUM EXPORTS DURING APRIL.

The exports of petroleum products from Batoum in April have again shewn a decline against those of March, in which month the exports rose to 5,000,000 poods. The decline was caused by the decrease by half of the bulk oil shipments, the slight increase in case oil, by 400,000 poods, could have no influence on the total result. The increased shipments of case oil must be attributed to the resumption of trade with the Far East. There was also a falling off in shipments of lubricating oils by about 40 per cent. against March; this decrease is, however, only of a temporary character and no importance need be attached to it.

The following are the figures of the arrivals from Baku and shipments from Batoum in April, also the stocks at the end of April: -

	Arrivals.	Shipments.	Stocks on April 30th.
Refined Kerosene ..	2,812,000	2,751,000	5,146,000
Kerosene Distillate ..	3,000	—	48,000
Solar Oil	84,000	—	330,000
Machine Oil	533,000	384,000	809,000
Spindle Oil	29,000	54,000	117,000
Cylinder Oil	19,000	7,000	46,000
Vaseline Oil	—	—	75,000
Lub. Oil Distillate ..	—	—	14,000
Residuals	203,000	96,000	351,000
Total ..	3,683,000	3,292,000	6,936,000

The small arrivals of goods in April fully corresponded to the limited demand for refined oils for export. The decline in exports was particularly marked in the case of France, which took 110,000 poods. Belgium and Holland took 231,000 poods, There were no exports at all to Germany, whilst shipments to British ports amounted to 1,099,000 poods, and to other European countries, 146,000 poods. To Alexandria there were shipped 415,000 poods chiefly in bulk and partly in cases; Turkish and Balkan ports, 483,000 poods, and the Far East, 652,000 poods. Shipments to Russian home ports shewed a great decline, having amounted to no more than 146,000 poods.

DELIVERIES OF PETROLEUM FROM THE BAKU REFINERIES.

THE EFFECT OF THE CASPIAN SHIPPING STRIKE.

According to statistics published by the statistical bureau of the Baku Petroleum Producers' Association, the deliveries of petroleum products from the Baku refineries during the first four months of 1907 amounted to 48,100,000 poods, against 81,900,000 poods in the corresponding period of 1906. The great falling off has its explanation in the great strike which for nearly two months paralysed the Caspian tank fleet, so that the transport of oils to the Volga could only commence in the latter part of April. The result was that the shipments from Baku by sea by the end of April amounted to only 22,300,000 poods, against 66,900,000 poods in the corresponding period of last year. On the other hand, the deliveries by rail increased from 14,200,000 poods in 1906 to 23,000,000 poods this year. Taking the various products, we find a marked improvement in the deliveries of illuminating oil, particularly by rail to Batoum. The deliveries to Batoum this year amounted to 12,800,000 poods, against 4,800,000 poods in the corresponding period of 1906. Now, when the Caspian tank fleet is again working to its full capacity, the deficiency in the shipments will gradually be wiped off, and if only no fresh complications will arise, the deliveries of oils this year will exceed those of last year, as notwithstanding the high prices ruling on the Baku market, the trade in oils is very brisk.

BAKU PETROLEUM PRODUCTION DURING THE FIRST QUARTER OF 1907.

According to official statistics the total production of crude oil at the Baku oil fields in the first quarter of 1907 amounted to 116,818,606 poods, against 104,137,572 poods in the first quarter of 1906.

The production by spouters and by baling month by month during the three months of 1907 is given below:—

	By baling.	By spouters.	Casual.	Total.
January ..	35,509,023	2,325,000	378,688	38,212,711
February ..	35,643,248	1,649,500	381,717	37,674,465
March ..	39,853,722	660,496	417,212	40,931,430
Total ..	111,005,993	4,634,996	1,177,617	116,818,606

The production of the different fields during the three months was as under:—

	January.	February.	March.	Total for 3 months.
Balakhamy ..	5,319,164	5,262,534	5,841,617	16,423,315
Saboontchi ..	13,570,075	12,680,364	15,894 634	42,145,073
Ramany ..	8,898,416	8,305,889	8,969,201	26,173,506
Bebe-Aibat ..	10,425,056	11,425,678	10,225,978	32,076,712
Total ..	38,212,711	37,674,465	40,931,430	116,818,606

The total production of the leading firms (in alphabetical order) during the first three months of this year was as under: –

	Poods.
Aramazd Co.	2,682,400
Assadulaeff	1,635,572
Baku Naphtha Co.	5,985,644
Baku Russian Petroleum Co., Ltd.	3,128,630
Bibi-Eybat Petroleum Co., Ltd.	2,574,000
Caspian Society..	6,748,430
Caspian and Black Sea Society	9,411,410
European Petroleum Co., Ltd.	1,740,000
Zoubaloff..	4,470,000
Kavkaz Co.	1,060,475
Kalantaroff and Co.	1,409,000
Krassilnikoff Bros.	1,391,478
Mantascheff and Co.	4,810,228
Mirzoeff Bros.	2,662,750
Moscow-Caucasian Naphtha Co.	3,851,798
Naftalan Co.	2,634,668
Nagieff	2,133,010
Neft Co. (late Tumaeff)	1,881,500
Nobel Bros.	16,380,101
Pitoeff and Co.	5,533,356
Russian Naphtha Co.	2,963,800
Russian Petroleum and Liq. Fuel Co., Ltd.	2,193,000
Shikhovo Co.	1,385,984
Soutchastniki	1,027,000
Schibaieff Petroleum Co., Ltd.	3,373,450
Ter Akopoff Co.	1,313,888
Tiflis Co. (Bebe-Aibat)..	1,298,000

BATOUM PETROLEUM SHIPMENTS.

The following were the shipments of petroleum products from Batoum during the week ended May 26th, 1907, o.s. (in poods):—

	Illuminating Oil.		Other Products.	
	1906.	1907.	1906.	1907.
To Europe ..	763,000	1,000	222,000	231,000
To the East ..	29,000	—	—	—
To Russian Ports.	108,000	107,000	2,000	8,000
From 1st Jan. to 26th May:—				
To Europe ..	5,178,000	7,086,000	3,055,000	4,446,000
To the East ..	1,574,000	5,454,000	23,000	111,000
To Russian Ports	1,469,000	1,113,000	110,000	66,000

AMERICAN NOTES

Sale of Oil Property.—An important sale of oil property has been recently consummated. The land transferred is in the Glenn pool and other prolific districts, the purchaser being Mr. J. Elkins, of Indiana, Pa.

New Companies.—Among the recent additions to the companies operating in the Texas fields, we have the Texas Cook Oil Co., the Gayle Oil Co. of Houston, the McCormick Oil Co. of South Bosque, and the Evening Star Oil Co. of Beaumont.

In the Tilbury Fields.—It is stated that the latest operators in the Tilbury fields of Kent county are Messrs. Mackenzie and Mann, who are investing $1,000,000 in the territory It is also reported that a considerable amount of Toronto capital is shortly to go into the Kent oil and gas fields.

To Test in West New Mexico.—The Crescent Oil and Land Co. which has acquired some territory in McKinley county, New Mexico, has started a test well upon its 20,000 acres. According to a report upon the territory by Mr. J. F. Porteus the evidences of favourable results being achieved are distinctly reassuring.

Mid-Continent Pipe Line Stocks.—At the first of the present month the total stocks held by the Mid-Continent pipe line companies reached 26,900,000 barrels. Of this quantity the Prairie Oil and Gas Co. held 25,500,000 barrels, and the remainder was shared between the Texas Co. and the Gulf Pipe Line Co.

Kern River Production.—Despite an unusual amount of development work being done in the Kern oil fields, California, there will be, say those familiar with conditions there, a decided decline in production this year. It is estimated that the total production in 1907 will not exceed 9,000,000 barrels, as compared with 11,000,000 in 1906.

Activity at Ebano.—The Mexican field of Ebano is now credited with a daily oil production of 8,000 barrels. The bulk of this production comes from four wells upon the property of the Mexican Petroleum Co., though there are a number of small producers in the field. The Mexican Central Railroad utilises some 4,000 barrels of the oil daily for its locomotives.

At Spindle Top.—The *Oil Investors' Journal* reports that the feature of the present operations at Spindle Top is the working of the old wells, many rigs now being engaged in this work in the Hogg-Swayne tract. Some fairly good producers have been developed from these old holes, though the life of some of them has been short, salt water soon replacing the oil.

Drilling Down Old Wells.—The REVIEW correspondent at Pittsburg writes that the Lower South-west operators are giving a good deal of attention to developing old locations in the old fields. So many of the tests that were drilled with a view to finding extensions proved failures that they have gone back to the interior, and are drilling where there is room for an additional well.

A Californian Gusher.—About four miles west of Coalinga, Cal., the Commercial Petroleum Co. has tapped a large body of oil and has on its hands a genuine gusher. The stream was tapped at a depth of 1,500 feet and it throws a stream 150 feet in the air. It is estimated to be doing 1,000 barrels a day. The latest report says that the drillers have not yet succeeded in capping the well.

The Glenn Pool.—The Glenn pool, judging by the latest reports, has reached its zenith, and its present production of approximately 110,000 barrels daily, is said to be shewing signs of decline. The older wells are naturally dropping off, while the new ones brought in, as a general rule, are not holding up like the old ones have done. Operators, therefore, believe that the life of the Glenn pool will be of short duration. At present there are 442 wells producing, and an estimate of their average daily yield is about 220 barrels.

The Pipe Lines to the Mexican Gulf.—Both the Texas and the Gulf pipe line companies of Indian Territory have completed 100 miles on their lines to the Gulf on the north end, and the rapid progress is stimulating the oil business in the Glenn Pool district. According to the latest issue of the *Oil, Paint and Drug Reporter*, the operators believe now that by the time they can sink new wells and bring in new production, these pipe lines will be ready to take their oil. Most oil men believe this will result in an increase in price of oil and they are getting as much in storage as they can.

RUSSIAN AND ROUMANIAN NOTES.

The Romano-American Co.'s New Manager.—Mr. Oscar Gunkel has been appointed manager of the Romano-American Co. with full powers.

Another Tzinta Well.—At Tzinta well No. 1 of the Alpha Co. has struck oil at a depth of 266 metres. The output has not yet been determined.

The Neft Co. has acquired the two following concessions from Mr. T. Bielozorsky:—Plot No. 21 at Berekei, 13½ acres, and 2¾ acres forming part of plot No. 9 at Surakhany.

Fires.—An outbreak of fire has destroyed the derrick and plot of well No. 18 of the Steaua Romana Co. at Campina. A similar fate has recently also overtaken borehole No. 3 of the Trajan Co.. at Baicoi.

Activity in Mai.—The production of petroleum in Mai, according to preliminary reports to hand, has been well maintained. Drilling operations during May have been carried on with great activity.

Astrakhan Shipments.—From the date of the opening of navigation on the Caspian on May 10th (o s.) to May 29th (o.s.), the shipments of petroleum residuals from Baku to Astrakhan has amounted to 25,445,485 poods.

To Develop Oil Deposits.—The *Trade and Industry Gazette* announces the discovery of petroleum on the Michaelovsky estate of Mr. Rylikoff, in the Bugurusiansky district of the province of Samara. A company is being formed to develop the deposits.

Petroleum in Podolia.—The discovery of petroleum deposits is announced in the province of Podolia, in South-western Russia. Indications of petroleum have been found in five different localities. This oil field, if its existence is confirmed, will form an extension of the Carpathian oil deposits of Galicia.

The Steaua Romana Co. is about to publish its report for the financial year 1906-7. The production of crude oil during the year has amounted to over 320,000 tons, against 218,473 tons in the financial year 1905-6. Probably a dividend of 8 per cent. will be declared against 6 per cent. paid last year.

The Romano-American Co. has asked the Roumanian authorities permission for to lay another pipe line from Moreni to Baicoi of a larger diameter than its present three-inch one, which is insufficient for handling its very considerable output. Well No. 6 of the Romano-American Co. continues to spout, yielding about 300 tons daily.

The Bebe-Aibat Strike Ended.—After a duration of more than two and a-half months the strike on the property of Messrs. Miloff and Tairoff at Bebe-Aibat has come to an end, and the men have returned to work on the terms offered by the firm. The demands made by the men have been categorically refused, the firm having decided to altogether close the works if the men raise fresh demands.

The Growing Use of the Internal Combustion Engine.—Internal combustion engines are now beginning to offer serious competition to steam engines and electric motor at the Roumanian oil fields. At present there are about 80 such engines in use there, of an aggregate capacity of 2,000 to 2,400 horse-power. These come partly from the Deutz gas engine works of Cologne, and partly from Tangyes in Birmingham.

Tcheleken.—Professor Grzibowski, of the Geological Academy of Krakow, has recently visited the island of Tcheleken in the Caspian Sea, and spent eight days in carefully inspecting the oil fields. The learned professor came to the conclusion that the Tcheleken oil fields are among the most prolific in the world, and was surprised at the slowness with which they are being developed by Nobel Bros., who already have a large number of wells there.

To Prospect at Karakchur.—The Russian Minister of Commerce and Industry has granted to the Moscow-Caucasian Petroleum Co. and the Baku Naphtha Co. the concession to prospect for and produce petroleum on a plot of 13½ acres in the locality of Karakchur, about one verst north-east of the Surakhany works; a plot of the same size and in the same locality has been conceded to Messrs. Benkendorf and Co. and Mr. Garoute, of France.

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SATURDAY, JUNE 22ND, 1907.

A PLEA FOR FAIR PLAY.

THE attitude which the American Government has taken up toward the Standard Oil Co., reflected as it is in the recent court decision against one of the associated companies of this Titanic enterprise, is one which—at the present moment more than at any other time—calls for most thoughtful consideration, lest the sweeping storm of prejudice which now prevails in so many quarters should blind our eyes to stubborn facts.

In the American courts the contention has been seriously put forward that together with many other corporations the Standard Oil Co. has grossly violated the Sherman anti-trust law, prevented and destroyed competition, and committed illegal acts in restraint of trade, and even in the face of the decision involving such enormous penalties against the Waters Pierce Oil Co. the point has not been set at rest as to whether these various technical offences have been committed. But the one great issue which underlies the whole proceedings against the Standard, gains importance with each criticism whether adverse or otherwise. That prejudice has played a very conspicuous part in the present agitation is of course admitted upon all hands, but apart from this, the fact remains that if by reason of the

Standard's power, it must necessarily violate the clauses of the Sherman laws of America, then the better course would be to demand the revocation of these laws. The chief factor of a country's prosperity to-day lies in the volume of its commerce, and if in the distant past, laws have been moulded which directly aim at the prevention of great industrial organisations for the economic conduct of an important industry, then immediate revocation is imperative if a nation's trade is not to be seriously jeopardised, if not partially ruined.

Going back now a quarter of a century, we are not unmindful of the great care which from the very first has been strictly observed in order that the business of the Standard should be conducted honestly and fairly, and it forcibly strikes us that the very fact that a concern has existed unchallenged for so many years, itself suggests that the chief fault of the Standard lies in its present greatness, and the success which has all along attended its carefully worked out operations.

That the American Government is bent upon crippling the organisation, which has been the pioneer of a most important branch of its international commerce, has long been evident, and in spite of the assurance of high departmental authorities in the States to the contrary, we have ample substantiation of our contention in that voluminous publication recently issued by the Commissioner of Corporations, which deals with the position of the Standard Oil Co. in the petroleum industry. When first it came to our knowledge that such an investigation was to be undertaken, we were hopeful that the narrow prejudices and jealousies against the Standard would be scattered to the four winds of heaven as a result of the intelligent probing into facts by Government officials, but such is unfortunately not the case. Apparently the love of fair play has been wiped out of existence in American Government circles, for more flagrant and unfair statements of half facts have, we believe, never been penned.

We do not intend to take our readers over the many phases of this lengthy report, but the few details to which we will call attention will in themselves shew to what an extent honesty of purpose is, among United States Government officials, subservient to prejudice and personal bias. The only consoling circumstance in the whole report is that possibly the Commissioner himself is profoundly ignorant of all matters appertaining to the conduct of the organisation he has "investigated," and personally we do hope this is so, for then much can remain unsaid, for 'twere better so.

To the careful observer who peruses the report where it deals with matters which do not lend themselves to misinterpretation, the reason for the Standard's success in the petroleum transporting, refining and distribution business is clear, but strange to relate, the compilers of the report make not the slightest attempt at a logical interpretation in regard to this matter. It is assumed that progress and success has been achieved by unfair dealing and dishonesty, and consequently from first to last the idea of the Commissioner of Corporations has been to evade giving anything approaching a rational account of the Standard's interesting history.

> "It cannot be too strongly emphasised that its growth and present power rests primarily upon the control of transportation facilities in one form or another. It has refused to act as a common carrier or to transport or deliver oil to independent refineries, while another important element in the control over the industry is secured by the Standard through its marketing methods. It uses very generally the bulk system of oil delivery, a cheaper, safer, and far more convenient method of delivery than in barrels, and thus dealing direct with the retailers, the Standard is enabled to destroy competition without disturbing prices over any large section of its trade. In brief, the history and present operation of these Standard interests shews throughout the past thirty-two years a substantial monopolisation of the petroleum industry of the country, a deliberate destruction of competition, and a consequent control of that industry by less than a dozen men who have reaped enormous profits therefrom."

These are a few sentences taken from the Commissioner's letter of submittal, which, we should imagine, give a very good idea of the way in which he has distorted facts to suit his own narrow-minded purpose. Some are facts pure and simple; others are untruths which must have been apparent to the one responsible for their publication.

Before going further, let us just say that now for upwards of a quarter of a century the Standard Oil Co. has thrown all its energy and its almost unlimited financial resources into the development of the American petroleum industry upon business-like and carefully thought-out lines, which have been the means of bringing America to the very front rank of the petroleum producing continents of the world, and also laying the basis for an international trade in petroleum products, the effects of which have spread to the farthest ends of the earth. Its present pipe line system of crude oil collection in even the most remote American field is the marvel of all who see it, and without a doubt this has been the one thing which has induced the American producer to so energetically search for oil, for he has known that a great organisation is behind him to take all the oil he produces off his hands immediately it reaches the surface, and to pay cash for it. As we say, it is a marvellous system, that which takes the crude oil half-way across the American Continent to the refineries on the seaboard, and one scarcely dares to picture what the American petroleum industry would have been to-day without it.

The garbled report of the Commissioner of Corporations seems to suggest some criminal offence by reason of the Standard's refusal to transport oil to competitive refineries. The argument is illogical and absurd, and the inference to be drawn from it is that the Commissioner is ignorant of the most simple principle of business—never use your finances and brains for the benefit of a competitor. Again the Standard appears to have committed that unpardonable offence of hitting upon the transport of oil in bulk—"a much cheaper and safer system, which reduces the cost of marketing greatly." Here, we presume, is an attempt to bring out the reason why the Standard has "deliberately destroyed competition," a conclusion arrived at without even child-like reasoning. As a matter of fact, we know that competition in the American oil industry has always been keen, and to-day it is keener than ever before, the only complaint of the Standard's competitors being that owing to its remarkable organisation and facilities—both the results of carefully thought out plans, which having been matured at the risk of vast sums of money, it is able to strike so narrow a margin between buying, refining and selling that the great difficulty is to make sufficient profits.

As to the statement that the Standard is controlled by less than a dozen men, we would put this down as a lie direct, for it is well known to everyone that the stockholders number over six thousand, while each of the associated concerns likewise have their general body of shareholders.

One very noticeable omission in the Commissioner's report is that of the operations of the Standard in other countries, where, thanks to their enormous distributing facilities, they have enabled American products to penetrate everywhere. The foreign policy of the Standard is of such importance to the petroleum industry as a whole, that when this is totally ignored in a report which professes to be serious, one can only come to the conclusion that there has been not the slightest intention on the part of those responsible to present matters in their true light. In our next issue we will deal at length with the great and lasting service the Standard has rendered to the petroleum industry by reason of its comprehensive policy.

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LONDON OIL SHARE MARKET.

FRIDAY, JUNE 21ST, 1907.

Business on the London Stock Exchange continues to move within the narrowest limits, and while leading securities are neglected, it is scarcely possible to expect much movements in the minor sections.

Shell Transport issues have certainly evinced a good deal of activity, and Californian Oilfields have also improved, but with these notable exceptions, there is little to chronicle with regard to the oil share section in the market, and where changes occur, they shew a declining tendency.

On Monday following our last report Shell Transport Ordinary rose 6d. to 44s. 9d. to 45s. 3d., and on Tuesday a further advance of 1s. 3d. took place to 46s. to 47s., which was augmented on the following day to 47s. 6d. to 48s. 6d. Californian Oilfields were also in request, closing strong at $5\frac{3}{4}$-6, and Schibaieff Preference was higher with an advance of $\frac{1}{4}$ at $1\frac{3}{4}$-2. European First Mortgage Debentures were two points lower at 77-81. On Thursday, after some little dealing, Shell Transport closed a shade higher at 47s. 9d. to 48s. 3d., but the Preference were not quite so good at $9\frac{7}{8}$-$10\frac{1}{8}$, and Assam Oil also lost $\frac{1}{16}$ at $\frac{1}{2}$-$\frac{5}{8}$. On Monday the tone was irregular; Shell Transport Ordinary on a few sales dropping to 46s. 9d. to 47s. 3d., while Schibaieff Preference were weak at $1\frac{1}{2}$-$1\frac{3}{4}$. The next change occurred on Wednesday, when Bibi-Eybats lost ground, closing $\frac{1}{4}$-$\frac{3}{8}$, having lost $\frac{1}{8}$ on balance. On the other hand, Californian Oilfields gained $\frac{1}{8}$ at $5\frac{7}{8}$-$6\frac{1}{8}$. With Thursday's dealings Shell Transport Ordinary lost another 3d. at 46s. 6d. to 47s. 6d., but Californian Oilfields rose $\frac{1}{8}$ to $5\frac{7}{8}$-$6\frac{1}{8}$.

At the Mid-June Settlement, which commenced on the 11th inst., the volume of business to be adjusted was exceedingly light, while the interest charged for the continuation of Shares was lower than at the last account—from 4 per cent. to 5 per cent. or 5 per cent. to 6 per cent. being the general rates charged.

A glance at the list of making-up prices discloses an almost unbroken line of depreciation in value—indeed, the only exception is Spies, which at 8s. 3d. shew no change. Anglo-Russians at 2s. 3d. are 1s. 3d. lower, and Baku Ordinary at 3s., 3d. Preference at 5s. 3d. are 9d. easier, while Californian Oilfields at $5\frac{7}{8}$ have shed $\frac{3}{16}$. Russian Ordinary and Preference at $\frac{1}{4}$ and 6s. lose 6d. and 1s. respectively, while Shell Transport Ordinary are $\frac{1}{16}$ lower at $2\frac{5}{16}$, and Schibaieff Ordinary and Preference are weaker to the extent of 6d. and $\frac{1}{8}$ at $\frac{1}{4}$ and $1\frac{7}{8}$.

PETROLEUM IMPORTS INTO GERMANY IN 1906.

According to official statistics the total imports of refined petroleum into Germany in 1906 amounted to 965,940 tons against 948,978 tons in 1905, and 970,590 tons in 1904.

The imports from the principal producing countries, were as under:—

	1906. Tons.	1905. Tons.
U.S.A.	781,886 ..	770,829
Russia	106,745 ..	118,878
Austria-Hungary	59,783 ..	50,892
Roumania	11,960 ..	1,904
Other Countries	6,566 ..	6,475
Total	965,940 ..	948,978

The total imports of benzine in 1906 amounted to 114,868 tons against 125,150 tons in 1905. The benzine imports in 1906 from the various producing countries, were as under:—

	1906. Tons.
U.S.A.	11,918
Dutch India	76,247
Roumania	14,840
Austria-Hungary	8,295
Other Countries	3,568
Total	114,868

The total imports of lubricating oils in 1906 amounted to 190,120 tons against 143,926 tons in 1905. The imports of lubricating oils from the different producing countries were:—

	1906.	1905.
U.S.A...	102,188 ..	60,422
Russia	60,399 ..	66,915
Austria-Hungary	12,747 ..	6,502
Other Countries	14,786 ..	10,087
Total..	190,120	143,926

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PETROLEUM IMPORTS INTO KINKIANG DURING 1906.

Reporting upon the trade of Kinkiang (China) for the past year, the English Consul says that American kerosene, owing to the disappearance from the market of Russian and Sumatran, shewed during the year a very large increase from 1,594,250 gallons, valued at £35,442, to 5,398,400 gallons, valued at £87,572. This is an unusual advance even on the total amount of oil of all kinds imported during 1905 and previous years, but the value was less by £6,786, indicating a very large reduction in the price of the American oil. This fall in price evidently caused large quantities to be stocked for future use.

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HAKODATE PETROLEUM TRADE IN 1906.

According to the report of the British Consul at Hakodate (Japan) for 1906, the total quantity of kerosene oil imported during the year was 4,521,579 gallons, valued at £84,432, as compared with 2,866,580 gallons, valued at £59,477 in 1905. The import from the United States remained the same as in 1905, the increase being due to heavy imports from Borneo.

FACTS ABOUT THE STANDARD OIL COMPANY.

A writer in *Leslie's Weekly* makes a few very appropriate and at the same time very truthful remarks regarding the Standard Oil Co. which deserve the greatest publicity, in view of the fact that one section of the press seems bent upon doing all in its power to present the Standard Oil Co. in the worst possible light. The writer says:—

The aim of the Standard Oil Co. constantly has been to cheapen the cost of oil to the consumer, and to this end a most important factor has been the cheapening of the cost of transportation by the construction of pipe lines. At first these lines were experimental, and it was a serious question for a time whether the large amount of money invested in them would not be lost. It was this company which established delivery tanks in all parts of the world, filling them by the use of tank cars and making distributions to the retailer by the assistance of tank waggons, thus saving the cost of a smaller package. It is an established fact that, with the decrease in the supply of timber available for the manufacture of barrel staves, it would have been impossible to-day to provide sufficient barrels for transporting oil to the various markets of the world. Hence the creation of the delivery tanks.

It has been the constant aim of the Standard Oil Co. to increase the uses of petroleum so as to utilise the surplus product. It undertook the manufacture of oil-consuming stoves, lamps, and even of wicks for the lamps, so that it might supply these at cost, and absolutely without profit, for the sole purpose of stimulating the consumption of oil. It is estimated that the sale of oil stoves, oil heaters and lamps amounts annually to hundreds of thousands of dollars. The advertising of the Standard Oil Co. naturally is for the benefit not only of the producer of oil, but also for the benefit of its competitors, as it makes an additional demand for the product. The company is therefore doing pioneer work. Investments made by the company in oil regions which have become exhausted are an approximate loss. It has empty tanks in the abandoned oil fields in the two States of Pennsylvania and Ohio which, in the prosperous tide of oil production, would contain the enormous amount of 40,000,000 barrels of oil.

The public has become so accustomed to attacks on our great industries, or those of them that have been singled out for abuse, that it fails to give fair consideration to both sides of the question. It is accustomed to think of the Standard Oil Co. as the property of a few men. The Commissioner of Corporations, Mr. Smith, in his report, makes this error. The stock of the Standard Oil Co. is owned by about 6,000 shareholders. The business has been built up, it is true, by a few of the pioneers in the oil industry, and its magnificent proportions must be regarded as an evidence of their rare skill and ability. If they have sought by every legitimate means in their power to overcome competition, to take advantage of every favourable circumstance to develop their business (which though larger in the aggregate is less in percentage than in past years), and to secure as much of the world's trade as they could, they have done only what every merchant who succeeds has done and must do to achieve success. As the Secretary of Commerce and Labour, the Hon. Oscar S. Straus, said before the Association of Manufacturers in New York recently, "It is not within the power or the proper sphere of the Government to equalise competitors, but it is within the power and proper sphere of the Government to equalise the opportunities of competitors." No one can find fault with this broad statement by a Cabinet officer, himself one of the most successful merchants of New York city, and therefore well qualified to speak.

PRODUCTION OF ENGLISH COMPANIES IN RUSSIA.

Baku Russian Petroleum Co., Ltd.—The production for the week ended 8th June was 236,000 poods, or 3,804 tons; and for the week ended June 15th was 215,000 poods, or 3,466 tons.

Russian Petroleum and Liquid Fuel Co., Ltd.—The production for the week ended 9th June was 175,000 poods, or 2,821 tons; and for the week ended June 16th was 165,000 poods, or 2,660 tons.

Spies Petroleum Co., Ltd.—The output for the week ended 9th June was 145,670 poods, or 2,349 tons; and for the week ended 16th June, 133,225 poods, or 2,148 tons.

The European Petroleum Co., Ltd.—The production for the week ended 9th June was 142,516 poods, or 2,297 tons; and for the week ended 16th June was 139,419 poods, or 2,248 tons.

DETAILS OF BAKU PRODUCTION AND BORING DURING MARCH, 1907.

The following are the details of the production of crude oil at the Baku oil fields during March as published in the latest issue of the *Neftiannoie Dielo*: —

	Number of Wells in Exploitation.	Production (in poods). By Baling.	By Spouters.	Casual.	Total.	Average per Well per Day.
Balakhany	635	5,827,926	—	13,691	5,841,617	306
Saboontchi	593	15,259,348	300,000	335,286	15,894,634	883
Ramany	203	8,575,405	334,496	59,300	8,969,201	1,486
Bebe-Aibat	204	10,191,043	26,000	8,935	10,225,978	1,877
Total in March, 1907	1,635	39,853,722	660,496	417,212	40,931,430	842
Total in February, 1907	1,668	35,643,248	1,649,500	381,717	37,674,465	909
Total in March, 1906	1,329	38,245,250	146,500	360,713	38,752,463	969

The production by spouters was obtained from the following wells:—

			Poods.
At Saboontchi	Neft Co.	Well No. 59, on plot No. 25	300,000
,, ,, ...	Krassilnikoff Bros.	,, No. 7 ,, ,, No. 33	300,000
,, Ramany	Nobel Bros.	,, No. 400 ,, ,, No. 140	34,500
,, Bebe-Aibat	Schibaieff Co.	,, No. 56 ,, ,, No. 29	2,000
,, ,, ...	,, ...	,, No. 76 ,, ,, No. 29	24,000

THE OIL FIELDS OF TRINIDAD.

Another Valuable Geological Report.

As our readers are aware, we have from time to time published several geological reports dealing with the oil fields of Trinidad, but the one now made public, by reason of its thoroughly comprehensive nature may be classed as one of the most interesting yet issued. It is the result of the work of Mr. Cunningham Craig, and covers a general report upon the central and northern anticlines.

In the introduction, the author points out that the area surveyed amounted to 210 square miles, part of which area was surveyed in 1904, and another portion the following year; but the greater part has been surveyed for the purposes of the present report since last July. Mr. Cunningham Craig then goes on to refer at great length to the geological structures and the strata, eventually coming to what may be considered the most important portion of the report—that dealing with the oil indications. In reference to these indications, he points out that they are very frequent and very well marked throughout a large part of the area. As the oil rocks usually crop out at the surface, the evidence is for the most part such as is usual to find in Trinidad on the outcrops of oil-bearing strata, viz., exudations of oil and liquid asphalt and cones and surface flows of pitch. These latter become sometimes of great extent, and may be traced with few intervals for distances up to a mile. In some localities, *e.g.*, Guapo, attempts have been made to work the pitch, and several hundred tons have been shipped at different times, but no great measure of success has attended such undertakings, partly owing to the difficulty of ensuring a constant composition of the material, and partly owing to the presence of light oils in the more liquid material, rendering attempts to refine in open vessels a difficult and dangerous task.

(i.) Beginning on the western coast at Point Ligoure, we have a remarkably good section of the oil-bearing rocks of the Rio Blanco horizon. A continuous section of upwards of 1,200 feet of strata is exposed, and only in one or two places does the evidence of dip become unreliable owing to small slips in the cliff. The dip varies from vertical at the northern and lower end of the section to 56 degrees at the southern and upper end; there are but few irregularities owing to current bedding, and the line of section is very nearly at right angles to the strike.

The following is a rough measurement of the strata exposed in descending order:—

		Feet.	
1.	White, water-bearing sandstone	110	
2.	Lignitic Group (with under clays and lignitic seams)	220	
3.	Sands and shaly sands (with iron-cemented flakes)	60	
4.	Oil-bearing sand	4	
5.	Stained, thin, sandy clays (no nodules)	93	
6.	Oil-bearing sand	15	A
7.	Pale, false-bedded sands (with concretions) ..	20	
8.	Hard, slightly bituminous sandstone, the uppermost and lowest beds oil-bearing	12	
9.	Pale clays and alternations of thin sands and clays	240	
10.	Hard, brownish sandstone (with clay—conglomerate and iron-cemented flakes and concretions, the lower part oil-bearing)	130	
11.	Pale clays and sandy clays	100	
12.	Sandy clays (with several bands of dark oil sand)..	180	B.
13.	Oil-bearing sandstone	30	
14.	Hard sandstone	10	
	Total	1,224	

In the whole section some 60 feet of rock are actually impregnated with petroleum, but the finer bituminous sandstones associated with these impregnated beds will probably all be found to contain oil in varying quantity when pierced in a well. Thus portions of 8, 10, 12 and 14 will require to be added, and should bring up the thickness of petroliferous strata to at least 120 feet.

The coast section is not tabulated in great detail, as when pierced in a well at some distance inland, these strata will probably be found to have been affected considerably by lateral variation, so that correlation in detail will be impossible, but the main general features of the series will probably be found to persist. Several of the more characteristic beds which are likely to persist should be easily recognised in a boring, and will enable the horizons reached to be identified with some degree of accuracy; the groups numbered 1, 2, 3, 7, 9 and 11 should prove useful in this manner to the driller.

Proceeding inland along the strike solid evidence fails almost entirely, but two well-defined lines of pitch deposits indicate the outcrops of the oil-bearing strata. These deposits correspond with the positions of the groups of strata marked A and B in the coast section; they have been mapped for a considerable distance, and from their directions and relative positions as well as from such solid evidence as is obtained, a gradual change in the direction of strike, and the fact that the dip decreases rapidly, can be made out. The pitch deposits are of considerable extent; hundreds of tons have been removed by digging, but a far greater quantity remains. A sample of the most liquid form of this asphalt was submitted to Professor Carmody, Government Analyst who gives the following results from analysis:—

Water, etc., volatile at 100° C... ..	18·50	(chiefly water)
Bitumen	80·40	
Non-bituminous organic matter ..	·86	
Ash	·24	
	100·00	
Soluble in petroleum ether	71	per cent.

Fractional distillation, after heating till nearly all the water was driven off.

Water	1·9
Illuminating oil (150°-300° C.)	25·0
Lubricating oil (above 300° C.).. ..	43·6
Residual bitumen	17·0
Loss	12·5
	100·0

Traced eastward, the lower oil-bearing horizon B soon passes beneath the surface, but the upper, A, has been traced as far as Fyzabad, pitch deposits being observed all the way with few intervals of any great extent, while actual outcrops of the oil rocks are not uncommon near Fyzabad and in the Morne L'Enfer Forest Reserve, where also the surface deposits of asphalt are often very large.

Beyond Fyzabad the indications of oil are few, on account of the spread of alluvium and the fact that the oil rocks on the anticline "pitch" beneath the surface, but on the San Francique road, where the uppermost oil-bearing bed emerges again, a large deposit of rather soft asphalt has been worked for road making purposes. No other actual outcrops of oil rock occur on this anticline west of the Oropuche lagoon, but at a point rather more than three-quarters of a mile east of the San Francique asphalt deposit gas issues briskly from the ground. The surface is formed of a stiff clay in this locality, but their is no mud volcano; the gas is evolved from minute cracks in the surface. On a light being applied small flames covered an area of about a square yard and burnt steadily till put out.

No other show of oil or gas has been detected on this anticline till the San Fernando Siparia road is reached, where small cones of asphalt appear exactly on the crest of the anticline on the eastern side of the road and within 80 yards of it.

On the same road, 300 yards south-west of the sixth mile post an oil rock, lying almost horizontally crops out and has been traced in hollows to the southward and westward, where small cones of hard asphalt mark its position.

(ii.) On the northern anticline only the uppermost beds of the Rio Blanco oil sand is exposed in the coast section at Vance River, but inland, denudation has laid bare the strata to a much greater extent, and a very large area is covered by oil rocks lying almost horizontally. Here also, just as in the Point Fortin and Point Ligoure district, it is possible to sub-divide the oil-bearing strata into two groups, but the thickness of the oil rocks seem to have somewhat increased. A sample of the oil sand from the outcrop on the road just north of Vance River bridge was analysed by Professor Carmody with the following result: —

Water, etc., volatile at 100° C.	2·60
Bitumen	17·50
Non-bituminous organic matter	0·46
Ash	79·44
	100·00

Soluble in petroleum ether, 14·2 per cent.

This is a remarkably high percentage of bitumen for a rock exposed to weathering.

In the northern part of the Morne L'Enfer Forest Reserve and the ground immediately to the north of it, the amount of asphalt and sticky oil exuded from the gently inclined oil rocks is enormous; the asphalt has flowed down ravines and spread out over the surface of low ground, while cones of all sizes, usually still active, are dotted over the outcrops; there is hardly a ravine without its outcrop of oil rock or its asphalt deposit, or a hollow without some trace of bitumen. In fact, there is enough "pitch" in sight at the surface to make, if concentrated, another pitch lake.

Traced eastward the crest of the anticline gradually dips so that the oil-bearing beds pass one by one beneath the surface, but asphalt deposits occur here and there almost as far as the unconformable outcrop of the upper tertiaries.

It is worthy of note that in nearly all of these asphalt deposits the bitumen is still being exuded. Many of the cones have central craters in which the soft asphalt or sticky oil is seen, and whence it issues slowly. In some cases gas is discharged regularly or intermittently through a film of soft asphalt, which rises as a bubble till the gas escapes, and then sinks to rise again in the same manner after a short interval.

This constant seeping and inspissation of petroleum shews that the supply from the underlying oil rocks is by no means exhausted, and suggests that vast stores of petroleum at greater depths await the outlet which a boring will furnish.

There is, of course, the possibility that at greater depths the oil sands may be found filled with water, which has, according to the hydrostatic theory which has found favour in many of the American fields, floated up the oil towards the outcrops. Only drilling can prove whether or not this be the case, but so far as percolation of surface water can have had any effect, the probability is against such action, for not only are the oil rocks overlaid and separated by beds of fairly stiff clay, but on the outcrops the exudation and inspissation of petroleum must have the effect of sealing up the porous oil rocks to some extent.

A well 16 feet in depth dug in the outcrop of the Rio Blanco oil sand on the northern anticline in Perseverance Estate, Guapo, yielded oil of which a sample supplied by Mr. Stollmeyer gave the following results on analysis:—

Specific gravity	·960
Mineral mattter	·04 per cent.

Results of fractional distillation:—

Boiling point, about 70° C.	—
Water	—
Petroleum spirit (below 150° C.)	8·0
Illuminating oil (150°-300° C.)	45·0
Lubricating oil (above 300° C.)	29·0
Residual bitumen	10·1
Loss	7·9
	100·0

This oil contains a higher percentage of light oils than might have been expected from such a shallow well dug in an outcrop, and indicates that there is no reason to suggest, as has been done by persons without local knowledge, that Trinidad oil will prove too heavy and asphaltic in character to be of any great commercial value. The prevalence of the great surface deposits of asphalt is probably the excuse for such an opinion, but when the conditions are considered carefully and the analyses of oils studied, such sweeping statements are seen to be quite unjustifiable.

From the Oropuche lagoon, eastwards and north-eastwards there are few indications of oil on the crest of the anticline, the horizon of the Rio Blanco oil sands is beneath the surface, which is occupied by clays. The outcrop of thin oil-bearing sand beds in the Fullerton cutting on a railway in the estates of the New Colonial Co., is not of great importance, except as indicating the extension of oil-producing conditions. The angle of dip is very high, approximately 65 degrees to 70 degrees, and drilling would be attended with considerable difficulty.

At a point five and a-half miles further east, two or three small pools of oil, with salt water and a slight discharge of gas, are observed on the crest of the anticline. The "show" is not of great importance, but it serves as a link in the chain of evidence; the horizon of the Rio Blanco oil sand is probably some distance beneath the surface at this point. There may be other indications in this district in abandoned land, which was only hurriedly examined, as it did not appear likely to yield much evidence.

(To be continued).

THE OIL FIELDS OF CALIFORNIA.

Description of the Los Angeles and Puente Hills . . Districts. . . .

(Concluded from page 330.)

Chino Field.

The Chino field occupies a small area on the crest of the divide between Soquel Canyon and the Chino Valley, five miles south-west of the town of Chino. It is located on what appears to be one of the north-east south-west flexures that radiate from the main Puente anticline. The wells, four in number, are drilled in the axis of the flexure and on either side. They pierce the Puente sandstone and underlying shale, but the details of their logs were unavailable at the time of the writer's visit. Aside from their commercial value, they are of especial interest as suggesting the possibilities of at least some of the subordinate folds in the hills.

Conclusions Concerning Future Development.

Whether petroleum will be obtained north of the line of maximum disturbance in the Puente fault zone, in rocks adjacent thereto, is questionable. Thus far wells in this position have been unsuccessful. A reservoir of coarse sand or other open-textured rock is filled with oil at the expense of the finer strata in which it may prove to have been but temporarily stored, or in some of which it may have even originated. Under conditions such as have been described, it may be inferred that in the region of the fault, along the southern face of the Puente Hills, the oil has been drawn from the beds north of the fracture zone into the more crushed and hence more open and porous strata of the same age south of it, and also into the still more receptive reservoir of coarse sidements presented in the Fernando formation. How great an area north of the fault may have thus been drained it is impossible to say.

An argument in favor of productiveness of the Puente formation away from the zone of faults is presented by the Puente Oil Company's wells, which are drilled in an anticline in the lower division of this formation. Similar evidence is also offered by the wells of the Chino Oil Co., which penetrate the Puente, including the sandstone, on a fold subordinate to the main Puente anticline, yet not far from its axis. That the lower Puente shale in these hills is generally oil bearing in some degree is recognised, that the Puente sandstone is also impregnated with bitumen is evident, but that the shale and the associated sandstone are everywhere impregnated to such an extent as to render them of economic value, under structural conditions that would be regarded as favourable, is improbable.

The yield of the individual productive wells in the Puente Hills varies from one to over 1,000 barrels per day, those in the Puente field giving the lowest averages and those in the Brea Canyon field the highest. The wells of the Whittier field produce oil varying from 14° to 24° B., the yield of the individual wells running from two or three barrels to nearly 175 barrels per day (in one well), although it is said that one or two wells went as high as 400 barrels at the start. The gravity of Puente field oil runs from 28° to 34° B., but the average yield of the wells is lower than in any other part of the district, and none of the wells has gone much over 100 barrels per day, even in their prime. In contrast with

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the low production and high-grade oil of the Puente field is the high production and medium gravity oil of the adjacent Brea Canyon field. The gravity here ranges from 18° to 26° B., while some of the wells yield as high as 1,000 barrels per day. Several flowing wells have been struck in this territory, one at least, it is said, gushing with a pressure of more than 250 pounds to the square inch. The Olinda field furnishes both high and low grade oil, the high grade, with a maximum of 35° B., coming from wells in the north-eastern part of the field yielding from two or three to 150 barrels per day, and the low grade, with a range of 18° to 20° B., coming from wells in the west end. Six "gushers" have been developed at Olinda, one of which is said to have flowed at the rate of 20,000 barrels per day for a short time. One of the flowing wells on the Santa Fe property is now flowing under a pressure of 100 pounds to the square inch.

The factors governing the yield of oil wells, aside from the natural conditions—porosity of rock, pressure, etc.—are usually those connected with the manipulation of the wells, such as size of casing, loss of tools, caving in of casing, or accidents of one kind or another. Sometimes, however, the condition of the oil market has a most potent influence on the production by causing the partial or total shutting off of the wells; this has been the cause of a decline in the production of several groups in the Puente Hills district during 1905.

The yield of most wells becomes less with the lapse of time. This decline is generally more marked during the first few months of the well's life than later, when the conditions governing the flow appear to become more stable.

Storage and Transportation.

With the exception of the oil in the Olinda field, much of which is stored in open earthen reservoirs, most of the oil of the Puente Hills district is stored in circular metal tanks. These tanks are usually covered and vary in capacity from five-barrel settling tanks to storage tanks holding about 55,000 barrels. The tankage of the Whittier field is something over 200,000 barrels; that of the Puente field, including the Chino refinery, over 100,000 barrels; that of Brea Canyon approximately 85,000 barrels, and that of the Olinda field possibly 200,000 barrels. In addition to this the Union Oil Co. has a storage capacity of about 150,000 barrels at Norwalk, the centre of the pipe line system, and of 37,500 barrels at San Pedro, its shipping point by boat.

The Union Oil Co. owns all the longer pipe lines in the district, with the exception of the 13-mile three-inch line of the Puente Oil Co. from its property to its refinery in Chino and the three-inch line of the Murphy and four-inch line of the Central oil companies from their wells in the Whittier field to Los Nietos, three miles farther west. The Union line comprises 17 miles of five-inch pipe from San Pedro to Norwalk; 15 miles of four-inch (some five-inch also) from Norwalk to Los Ange'es; 12 miles of four-inch from Norwalk to Brea Canyon; three miles of four-inch from Brea Canyon to Olinda, and four miles of four-inch from Whittier to a junction with the Norwalk-Brea Canyon line.

The oil is shipped from Olinda and Los Nietos over the Atchison, Topeka and Santa Fe Railway, and the Southern Pacific Co. has connections at Whittier and Los Nietos and also at the Puente Company's refinery at Chino. The Union Oil Co. is the only one shipping oil by water from this district, its loading point being San Pedro, which, as already mentioned, is connected by pipe line with Norwalk and thence with all the fields of the Puente Hills.

A NEW TEXAS OIL FEILD.

Recent operations at Columbia, Texas, are convincing many that the locality will soon prove itself to be a very profitable oil field.

Mr. Nelson, who is interested in a producing well in Columbia, was there when the well came in a few days ago, and he is convinced that there is a fine pool of oil in that vicinity. The present well was ruined by the blow-out which occurred before the well came in, and Mr. Nelson says it is the first instance of a well being brought in at all after such a blow-out. The well will be a good gas producer, however, which is an important item in the development of that field, owing to the high price of fuel.

The Columbia field will be a particularly desirable location owing to the transportation facilities offered by the Brazos river. The present well is only a short distance from the river and all the oil that can be produced there can be barged to the gulf and around to Port Arthur and the Sabine Pass at a very small cost. Pipe lines will not be needed, owing to the cheapness of water transportation facilities and no dependence upon pipe lines.

The Columbia oil is of about the same quality as the Spindle Top product.

Telegraphic Address:—"OLEINE." **Telephone Nos.:—** **249 & 254 LIVERPOOL.** **1990 MANCHESTER.**

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THE PETROLEUM DEPOSITS OF KANSAS.

AN EXHAUSTIVE SURVEY.

(*Concluded from page* 320.)

When the Standard Oil Co. first began buying oil and established a general market in these fields it divided the Kansas territory into two divisions, named North Neodesha and South Neodesha. As the division line between the two areas thus created is the township line, about three miles north of Fredonia and nine miles north of Neodesha, the whole of the Independence quadrangle lies in the South Neodesha division. This division contains the heavier oil, for which, until recently, the company has constantly paid 20 cents per barrel more than for oil from the North Neodesha division. Early in the summer of 1903 South Neodesha oil sold as high as $1·38 per barrel, the highest price ever reached by Kansas oil.

Late in the year 1904 the Standard Oil Co. revised this mode of classifying oils and began buying by gravity tests. It set its highest price on oil with a gravity of 32° B. (0.8641), which it still calls South Neodesha oil. Oils heavier than this were discounted 10 cents per barrel for each degree, so that an oil testing 28° B. (0.8860) was priced at 40 cents per barrel below that testing 32 degrees. It has not increased the price for oils above 32 degrees, although much of the oil tests considerably higher. Oil from the Bolton region varies slightly from well to well, but ranges about 34° B. (0·8536); Neodesha oil in general runs about 36° B. (0·8433); and oil from the eastern part of Montgomery county, around Cherryvale and Coffeyville, is variable, some of it being heavy enough to fall below 30° B. (0·8750). This readjustment of prices practically amounted to a considerable reduction in the total amount of money paid for Kansas oil.

Development of the Oil Industry.

The greater part of the field is operated under the lease system, by which gas delivered for domestic use on the premises is frequently included. The Osage Indians are reported to receive $50,000 annually for a blanket lease covering their country. There are also intermediate companies, which lease and buy up both large and small exploitation areas, and chart and sublet them to other companies or operators for development. The area covered by a lease varies from a few acres in or near a highly productive district to many square miles in a new or unprospected part of the field. A quarter section is a fair average. The general productiveness of the field tends to prevent abnormally large leases, as the percentage of producing wells to the number drilled is very high—higher, it is claimed by some, than in any other field in the world.

The peculiarities of location of the wells are explained in part by the fact that each operator must confine his drilling to the area of his own lease, and that sometimes a lease covers 160 or more acres, and quite as frequently a smaller space. Again, after it is practically determined that the area is productive throughout, the operator usually drills around his border lines in order to protect himself from his neighbour, who may be drilling on adjacent ground.

Since about 1896 commercial operations in the Kansas-Indian Territory field have been largely in the hands of the Prairie Oil and Gas Co., the Kansas branch of the Standard Oil Co. This company is not an exploiter or developer of territory, nor a producer, but a dealer, since it purchases the oil from the producer and refines and markets it. Its expenditures, however, have been so great that it has become a most important factor in the general development. During the latter half of 1903 and the first half of 1904 many new companies were formed, which have done much development work.

Owing to higher freight rates oil well supplies are reported to cost about 5 per cent. more than in the Pennsylvania fields, but the nature and attitude of the formations render drilling easy. The cost of drilling is only about 90 cents per foot, and the rate, under average conditions, is about 100 feet per day. This fact, together with favourable climate, topography and railroad facilities, has made it possible for development to proceed at a very rapid rate. The railroad facilities are now being further increased by the construction of interurban electric systems by the Union Traction Co., which contemplates extending its service throughout South-eastern Kansas.

In a considerable portion of the Kansas field the basis of appraisement for taxes for oil wells is $405 each, and the net assessment is one-third of this amount, or $135. The oil men are asking for a reduction of these figures to a net valuation of $100 on each well, and a valuation of other property and equipment in proportion.

With regard to the entire Kansas-Oklahoma-Indian Territory field, statistics furnished by the division of mining and mineral resources shew that there were 391 producing wells in Kansas at the beginning of 1903, which number increased to 1,145 by the end of the year, and to 2,782 by the end of 1904. In Oklahoma and Indian Territory there were 361 completed wells at the close of 1904, of which 243 were oil wells, 21 gas wells and 97 dry holes, and 70 wells were in process of drilling; January 1st, 1903, only 30 wells had been completed, of which 17 were oil wells, 2 were gas wells and 11 were dry holes. In the summer of 1904 the Indian Territory output was in round numbers 286,000 barrels, which was handled in tank cars, 16 cars daily being shipped from Bartlesville, and occasionally one or two from Red Fork, Chelsea and Muscogee; July 1st, 1904, not a well had yet been drilled at Cleveland, none at Alluwe, and only two on the Osage lots of the Ochelata-Ramona pool. By July, 1905, it was reported that 1,700 wells had been drilled in Indian Territory and Oklahoma, and that the Osage Reservation had a daily production of 16,000 barrels; Cleveland, 12,000 to

15,000 barrels; Alluwe, 4,000 barrels; Tulsa-Red Fork, 15,000 barrels; and the remainder of the Cherokee Nation, 5,000 barrels. In order to keep pace with this rapid development and to take care of the oil produced, a 6-inch and an 8-inch pipe line were laid during the same period from Ramona to Kansas City, also 4-inch lines to Cleveland and Red Fork to Chelsea, to Chautauqua and to Paola and Rantoul, and in addition a refinery was built at Sugar Creek, near Kansas City. More than a hundred 35,000-barrel tanks were completed at Humboldt, Caney, Bartlesville, Ramona, Cleveland, Tulsa, Muscogee and Chelsea, and 7,000,000 barrels of crude oil were placed in storage.

To handle this large amount of oil and the probable increase in the future the Standard Oil Co. in the fall of 1904 began to lay a pipe line from the Kansas fields to its large refinery near Chicago, at Whiting, Ind. Here this line meets the Standard's Eastern system of pipe lines, at a distance of nearly 600 miles from Kansas City, a direct connection being thus established between the Kansas-Indian Territory field and the Atlantic seaboard. This great line is over 1,800 miles in length, 20,000 barrels are required to fill the pipes, and it takes ten days for the first part of the supply introduced in the West to reach the coast. Although its completion was delayed by change in the right of way, oil was turned into the line at Kansas City, July 20th, 1905. The line has a complete tankage system, with a capacity of 10,000 barrels. Its importance to the interior producer can hardly be over-estimated, as it means an Eastern outlet for Kansas-Indian Territory oil.

At present the Standard Oil Co. owns nearly 12,000 miles of pipe line in the Kansas-Indian Territory oil belt, the value of which, together with that of its leased oil-producing properties, tankage and refineries, the cost of the Whiting line and of other projects completed, and in course of completion, makes the total investment of the company in this field nearly $15,000,000.

The greater part of the crude oil is purchased by the Standard Oil Co., by which it is refined and marketed; some is used by the Webster refinery at Humboldt; some is exported by Mr. L. N. Knapp, of Chanute, and a relatively small quantity is consumed locally for drilling, fuel, lubrication, manufacturing and sundry other purposes. The oils distilled at Neodesha vary from 25 to 30 degrees gravity, and produce approximately 40 per cent. of light oils which go into the market of Kansas and the adjacent states, while the heavier product is sold or utilised for fuel.

The most promising field of usefulness for the low-grade crude oil is as fuel to generate steam, for which purpose it is rapidly being adopted by the larger manufacturing, packing and milling plants at Kansas City, Wichita, Hutchinson, Salina, Emporia and other points and to some extent by the railroads. The Standard Oil Co. has recently tested the Kansas oil for fuel purposes, and finds it fully as good as California oil. More recently samples of Wayside crude oil, produced by Messrs. Patty and Reese, were practically tested by the Dold Packing Co.'s plant at Wichita, with very favourable results in competition with coal at $2·50 per ton. It is roughly estimated that 3 barrels of oil contain as many heat units as a ton of good soft coal, and that 5 barrels of the lowest grade of oil are equivalent to a ton of Pittsburg or the best grade of bituminous coal. At present prices, under the new maximum freight rate law, oil can be delivered at almost any town in Kansas at a total cost of about 37½ cents per barrel, which renders oil fuel, even when shipped by railroad, about 40 per cent. cheaper than soft coal at $2 per ton. An independent company, which has been granted a pipe-line right of way from Cherryvale to Topeka, is undertaking to supply Topeka and intermediate points with fuel oil at the rate of 20 cents per barrel.

Another purpose for which crude oil is being satisfactorily utilised is in the improvement of public highways. Its systematic use in some localities has already had excellent results. Its utility for this purpose is very materially enhanced by a substantial asphalt base, which acts as a binder on the same and detrital dust particles of the road. It follows that oil of the most inferior grade is the best for this use. It is said that it is of the utmost importance to apply only the right quantity of oil, which varies with the character of the road from 1,000 to 2,000 gallons per mile, and that two applications a year for streets and one for pikes will completely eliminate the dust.

Among the localities beyond the borders of Kansas where oil is used for road purposes a few may be noted. The report of the department of highways of California shews that the length of oiled roads and streets in that State is about 2,800 miles, and distributed in 37 different counties. The California roads are ordinarily dusty and sandy, but are put in good condition at a cost of $200 to $300 per mile; subsequent applications require less oil, and are therefore cheaper.

The Kansas-Indian Territory field possesses to a marked degree the most important conditions governing the occurrence of oil in economic quantities, namely, an abundant supply of porous sandstone reservoirs in which it may be stored, and a sufficient covering of impervious shale and limestone to prevent its escape.

Since the entire area of the Independent quadrangle lies within the field and is underlain by the oil-bearing formations, and since much of it has not yet been prospected, any part of the unprospected portion may become productive when drilled. From the prospecting and development that has been accomplished, however, it does not seem likely that the production of the quadrangle will ever much exceed its present rate. In fact, the life history of the wells and pools seems to shew that the quadrangle will do well if it can maintain the present rate for any considerable number of years for oil, however abundant, stored in any locality by nature, is limited in quantity, and when a reservoir is once exhausted it will not be replenished.

To the west of Chautauqua county, oil-bearing sands have recently been found at Winfield at the depth of 1,600 feet, and at Dexter at 1,400 feet, the sands at Winfield being 35 feet thick, but not yielding oil in paying quantities. This fact, considered in connection with the depth, makes it seem improbable that the productiveness of the Kansas-Indian Territory field will ever be found to extend thus far eastward.

The American Oil Market.

New York, Week ended June 8th.

The search for new producing territory has been keenly prosecuted according to late reports from the oil fields, and further stimulus is likely to be afforded by an advance in crude oil, the first change in more than a month. Only two grades were affected, however, Cabell, which is held 10c. above the previous quotation and Ragland, which is higher by 5c. Results, on the other hand, have not been of an encouraging character, light wells still being the rule throughout the south-west fields and new production shewing no material increase. In the fields of the Pennsylvania classification, West Virginia continue to hold principal attention, the best results being encountered in Brooke and Roane counties. In the former a new strike was found good for 65 barrels a day natural, says the *Oil, Paint and Drug Reporter*, and is expected to yield 100 barrels when shot. On the Big Injun development in Roane county a well was brought in having to its credit 40 barrels the first 24 hours after it had been shot. In Doddridge county operations were encouraged by striking a well that started to flow at the rate of 12 barrels an hour, but other completions resulted in light producers and dusters, chiefly the latter. Dusters, with an occasional gasser, proved the rule in other sections of West Virginia. The prospects for a new pool in Clinton township, Venango county, Pa., were stimulated with the completion of a well shewing 150 barrels natural. Results in Ohio were of little consequence. Illinois is holding up a good average, and a gusher was reported near Robinson, Crawford county, which was credited with 1,000 to 2,000 barrels a day. In the Oblong district, in the same county, wells from 200 to 300 barrels attracted little comment, and in Martin township two producers, one of 750 barrels and the other of 500 barrels were encountered. Reports from Indian Territory have indicated keen prospects for development work during the summer, especially in the vicinity of Muskogee. A new well near Delaware, in the Cherokee Nation, was credited with 600 barrels a day, and a promising strike in the tract of the famous Glenn fields that was regarded as practically worthless has been reported. A feature of Kentucky operations was the completion of a test well in Wayne county that was good for 300 barrels as an initial production. A report of the oil fields for May shews an increase of 198 completions over April, and of this number 152 were in the Pennsylvania districts, but the gain in production was 299 barrels against 614 barrels during April. The Mid-Continent fields scored the best results during May, the gain in new production amounting to 15,475 barrels, although there were 58 less wells completed than during April. The total gain in production during May was 18,084 barrels, against 8,603 barrels during April.

Refined and Products.—Of principal interest in the market for refined is the enhancement of export quotations for bulk, barrels and cases, New York and Philadelphia loading by 25 points. Engagements for export during the week comprise 220,000 cases for China, June-July, 155,000 cases for China and Java, July, 100,000 cases, July, 100,000 cases for the River Plate, June-July, 5,000 barrels for Ireland and Denmark, prompt, and 653 tons of case oil for Havana. Clearances during the week aggregated 7,872,920 gallons, against 8,279,910 gallons during the previous week.

The products are firmly maintained, but no changes in quotations have been recorded. The domestic demand is of well sustained proportions, especially for gas-engine consumption. Exports of naphtha during the week totalled 201,720 gallons, against 210,110 gallons during the previous week. A sharp advance is noted in crude petroleum and the products, and residuals and kerosene are also quoted at a higher level. American case oil is firmer in India. Offers of Texas lamp oil at low prices have imparted a softening tendency to the London and Liverpool markets.

CLOSING QUOTATIONS.

Crude.	Week ended June 1. 1907.	Week ended June 8. 1907.
Pennsylvania crude in bbls.	$8·20	$8·20
Pennsylvania crude in bulk	4·75	4·75
Residuum, bbls. for export	6@6½	6@6½

Crude at the Wells.

The quotations for oil represented by credit balances were ;—

	Week ended June 8. 1906.	Week ended June 8. 1907.
Tiona	1·74	1·78
Pennsylvania	1·64	1·78
North Lima	0·98	0·94
South Lima	0·93	0·89
Indiana	0·93	0·89
Canadian Oil:		
Petrolia	1·37	1·34

Refined—For Export.

		Week ended June 8. S.W.	W.W.
Barrels, cargo	per gal.	$8·45	@10 45
Philadelphia		8·40	@10·40
Bulk, New York		5·00	@ 7·00
Bulk, Philadelphia		4·95	@ 6·95
Cases, New York		10·90	@13 90
Cases, Philadelphia		10·85	@13·85

Refined in Cases—110 Fire Test.

	Week ended June 1. 1907.	June 8. 1907.
3,000 to 10,000	10·80	10·80
1,000 to 3,000	10·85	10·85

Refined—Jobbing Lots.

In barrels, pkgs. included.

		Week ended June 1.	June 8.
120 fire test, S.W.	in barrels	12	12
130 fire test, S.W.		12½	12½
150 fire test, W.W.		13½	13½
In bulk from tanks		10	10
300 fire test		13¼@14	13¼@14

Naphtha and Gasolene.

	Week ended June 1.	June 8.
Naphtha, crude, car. lots, 68 @ 72 deg.	17·00	17·00
Gasolene, 86 deg.	24·00	24·00

Pennsylvanian Oil Runs from May 31st to June 3rd were:—May 31st, 273,391; June 1st, 82,125; June 2nd, 26,267; June 3rd, 135,810. For the month of April, 2,921,463.

The Deliveries of Pennsylvania Oil from May 31st to June 4th were:—May 31st, 167,106; June 1st and 2nd, 309,761; June 3rd, 177,398; June 4th, 169,940. For the month of April, 5,139,445.

Clearances for the Week.

During the week ended June 7th, and since Jan. 1 the clearances of petroleum, in gallons, from the port of New York, were as follows:—

	Week.	Year.	1906.
Refined	7,872,920	203,906,690	212,888,600
Crude	—	1,039,925	227,800
Naphtha	201,720	2,960,250	8,843,567
Residuum	—	307,087	—

Export Statistics.

The total exports from the port of New York and from the United States have been:—

	Gallons.
From New York, week ended June 7th	10,497,247
Total from New York, from Jan. 1st, 1907	294,374,641
Same period last year	248,762,613
Increase	9,612,028
From United States, week ended June 7th	15,845,373
Total from United States, since Jan. 1, 1907	512,556,487
Same period last year	505,883,754
Increase	6,672,733

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The "Review" Shipping List.

JUNE 21, 1907.

(*The following abbreviations are used in this table:*—L. Left; P. Passed; Arr. Arrived; Sp. Spoken; Tr. Trading.)

Vessel.	From.	For.	Latest Date and Position.
ALCHYMIST	Terneuse	Lisbon	L. June 15
ALICE ISABELLE	La Rochelle	Philadelphia	L. May 8
ALEMBIC	New York	Sydney (C.B.)	L. May 28
AMERICAN	New York	Puerto Mexico	P. Sand Key, May 7
APPALACHEE	Hankow	San Francisco	Arr. June 11
APSCHERON	Ibrail	Spezzia	Arr. June 17
ARAL	Philadelphia	—	P. Butt of Lewis, June 17
ARAS	Penarth	Philadelphia	P. Barry Island, June 11
ARGYLL	—	—	Coasting U.S. (Pacific)
ASHTABULA	San Francisco	Shanghai	At Taku, June 8
ASTRAKHAN	Tyne	Philadelphia	Arr. June 14
ATLAS	—	—	Coasting U.S. (Pacific)
AUGUSTA	Havana	Philadelphia	P. Del. Break, June 10
AUGUST KORFF	Hamburg	Philadelphia	L. Tyne, June 19
AUREOLE	Philadelphia	Plymouth & Sunderland	P. Del. Break., June 7
AZOV	—	—	Trading on W.C. of South Amca.
BAKU STANDARD	Kustendje	Havre	Arr. June 18
BALAKANI	London	Batoum	P. Peniche, June 12
BATOUM	Hong Kong	Palembang	At Singapore, May 15
BAYONNE	Savona	Philadelphia	Arr. June 4
BEACON LIGHT	Rouen	Newport	P. Lizard, June 19
BEME	Rangoon	Bombay	Arr. May 28
BLOOMFIELD	Philadelphia	Flushing	P. Dungeness, June 19
BORJOM	Batoum	Alexandria	Arr. June 3
BRILLIANT	Copenhagen	Philadelphia	P. Dunnet Head, June 18
BROADMAYNE	Barrow	London	Arr. June 18
BULLMOUTH	Hankow	Shanghai	Arr. May 25
BULYSSES	Cardiff	Port Said	P. Gibraltar, June 17-18
BURGERMEISTER PETERSEN	New York	Stettin	Arr. June 18
CALCUTTA	San Francisco	Shanghai	L. May 27
CARDIUM	Cardiff	Singapore	Arr. June 13
CATANIA	Gaviota	Salina Cruz	Arr. May 3
CAUCASIAN	Kustendje	London	Off Ushant, June 19
CHARLOIS	Rotterdam	Philadelphia	L. June 10
CHESAPEAKE	Singapore	New York	P. Gibraltar, June 12
CHESTER	Antwerp	Grimsby	Arr. June 16
CIRCASIAN PRINCE	Buenos Ayres	Callao	L. Monte Video, May 5
CLAM	Balekpappan	Samboe	Arr. June 15
COL. E. L. DRAKE	New York	San Francisco	L. Punta Arenas (Mag.), June 6
COWRIE	New York	—	L. June 17
CYMBELINE	Batoum	Manchester	L. June 14
CZAR NICOLAI II.	Hamburg	Batoum	P. Gibraltar, June 7-8
DAGHESTAN	Antwerp	Port Arthur	P. Prawle, June 17
DAKOTAH	Canton	San Francisco	L. June 2
DELAWARE	Bombay	Palembang	L. May 22
DEUTSCHLAND	New York	Hamburg	Arr. June 16
DIAMANT	Rotterdam	New York	Arr. June 16
EDWARD DAWSON	Swansea	Port Arthur (Texas)	Arr. June 18
ELAX	Philadelphia	Calcutta	Arr. June 19
ELSIE MARIE	New York	Hamburg	Arr. June 1
ENERGIE	Philadelphia	Stettin	Arr. June 15
ERIVAN	Manchester	Batoum	P. Gibraltar, June 17
ETELKA	Serville	Philadelphia	Arr. June 11
EUPLECTELA	Batoum	Hamburg	P. Cape Bon, June 18
EXCELSIOR	New York	Rotterdam	P. Dover, June 18
EZIO	—	—	Coasting Peru
FRANCE MARIE	Marseilles	Philadelphia	P. Gibraltar, June 17
GEESTEMUNDE	Stettin	Philippeville	Arr. June 10
GENESSE	Philadelphia	Liverpool	Arr. May 26
GEORGIAN PRINCE	Havana	Norfolk (Va)	L. June 7
GOLDMOUTH	Balekpappan	—	P. Tarifa, June 19
GUTHEIL	Tyne	Philadelphia	Arr. June 12
HAINAUT	Hamburg	Alexandria	P. Sagres, June 15
HARRY WADSWORTH	Swansea	Constant'ple	P. Gibraltar, June 11
HELOIS	Hamburg	Philadelphia	P. Dunnet Head, June 19
HERMIONE	Batoum	London	L. June 17
HOTHAM NEWTON	Batoum	Hamburg	P. Dover, June 16
HOUSATONIC	Avonmouth	New York	P. Lundy, June 9
IMPERIAL	—	—	Tr. on Lakes btn. U.S.A. and Can.
JOANNIS COUTZIS	Swansea	Batoum	P. Mumbles, June 14
J. B. AUG. KESSLER	Singapore	Rotterdam	P. Dover, June 18
JAMES BRAND	Philadelphia	Manchester	P. Del. Break., June 9
JULES HENRI	Barcelona	Philadelphia	P. Gibraltar, May 2
KURA	Newport	Constant'ple	P. Gibraltar, June 10
LA CAMPINE	Antwerp	Philadelphia	P. Lizard, June 12
LA FLANDRE	Ghent	New York	P. Dover, June 13
LA HESBAYE	Batoum	Hamburg	P. Constant'ple, June 13
LA MADELEINE	Algiers	Brest	Arr. June 16
LA VIGUESA	Philadelphia	Vigo	Arr. June 13
LACKAWANNA	Kustendje	Bombay	Arr. May 29
LANSING	Astoria	San Francisco	Arr. Mar. 14
LE COQ	Kustendje	Rouen	P. Sagres, June 16
LOUTSCH	Dunkirk	Novorossisk	L. Constant'ple, May 29
LUCERNA	Bergen	Tyne	Arr. May 23
LUCIGEN (Now Cuyalogo)	Philadelphia	Manchester	Arr. June 17
LUCILINE	Cardiff	Philadelphia	P. Fastnet, June 8
LUMEN	Tyne	Philadelphia	Arr. June 19
LUX	Rouen	Cardiff	Arr. June 19
MANHATTAN	Messina	Constant'ple	P. Dardenelles, June 14
MANNHEIM	Tyne	Philadelphia	Arr. June 16
MARGARETHA	Batoum	Avonmouth	Arr. June 16
MAVERICK	Astoria	San Francisco	Arr. June 4
METEOR	Batoum	Vladivostock	At Singapore, May 15
MEXICAN PRINCE	Liverpool	Cienfuegos	L. June 6
MIRA	Blyth	New York	Arr. June 16
MUREX	Balekpappan	—	L. June 16
NARRAGANSETT	New York	London	L. June 9
NERITE	—	—	Tr. in China Seas
NEW YORK	New York	Southampton	Arr. June 16
OCEAN	Antwerp	Batoum	At Malta, June 18
OILFIELD	Philadelphia	Cette	P. Del. Break, June 7
ORANJE PRINCE	Banes	—	L. June 3
ORIFLAMME	Rouen	Philadelphia	L. June 9
OSCEOLA	Genoa	New York	P. Tarifa, June 14
OTTAWA	Galveston	Vera Cruz	L May 29
OURAL	Batoum	Barcelona	L. June 11
PALEMBANG	Aroe Bay	Canton	L. Hong Kong, May 10
PAULA	Tyne	Philadelphia	P. Dunnet Head, June 8
PECTAN	Port Arthur (Texas)	Amsterdam	P. Dover, June 19

Vessel.	From.	For.	Latest Date and Position.
PENNOIL	Tyne	Philadelphia	P. Dunnet Head, June 16
PERLAK	Soesoe	Singapore	L. May 11
PHOEBUS	Hamburg	New York	Arr. June 10
PINNA	Antwerp	San Francisco	Off Ushant, June 2
POTOMAC	Belfast	New York	P. Malin Head, June 8
PROMETHEUS	New York	Hamburg	L. June 14
PRUDENTIA	Rouen	Tyne	Arr. April 18
QUEVILLY	Rouen	Philadelphia	P. Lizard, May 11
RION	Kustendje	Hull	P. Sagres, June 14
ROCK LIGHT	Tyne	New York	P. Butt of Lewis, June 12
ROMANY	Thameshaven	Rotterdam	Arr. May 29
ROSSIJA	Rotterdam & Tyne	Archangel	Arr. May 13
ROTTERDAM	Rotterdam	Barry	Arr. June 9
RUSSIAN PRINCE	Havana	Havana	L. June 6
SALAHADJI	—	—	Tr. Sts. Settlem'ts and Java Seas
SAN CRISTOBAL	Liverpool	Port Arthur (Texas)	Arr. June 16
SAN IGNACIO DE LOYOLA	Philadelphia	Pasages	L. Del. Break., May 27
SAXOLEINE	Philadelphia	Havre	P. Del. Break., June 9
SEMINOLE	Shanghai	San Francisco	L. Muroran, June 5
SINGU	—	—	Tr. in East Indies
SNOWFLAKE	Penarth	Cuba	P. Barry Island, June 5
SOPHIE	Batoum	Medi'ranean	Bchd. Mouth of Bosphorus, May 31
SPONDILUS	Cardiff	—	At Port Said, June 20
STANDARD	New York	Swinemunde	L. June 8
STROMBUS	Kobe	Balekpappan	Arr. June 17
SURAM	Penarth	New York	L. June 15
SUWANEE	Tyne	Philadelphia	Arr. June 16
SVIET	Batoum	Odessa	L. June 3
TELENA	Soesoe	—	L. Singapore, June 13
TEREK	London	Kustendje	P. Gibraltar, June 15
TIFLIS	Batoum	Antwerp	P. Constant'ple, June 7
TIOGA	Tyne	—	P. Dungeness, June 13
TONAWANDA	Shanghai	Muroran	L. June 1
TROCAS	Samboe	—	L. June 13
TURBO	Batoum	Hamburg	At London, June 18
TUSCARORA	Calcutta	Boston & New York	P. Malta, June 16
TWINGONE	Rangoon	Madras	L. May 30
VEDRA	Alexandria	—	At Port Said, May 31
VILLE DE DIEPPE	—	—	In Port Havre, June 13
VOLUTE	Shanghai	—	L. June 9
WASHINGTON	Bremerhaven	New York	L. Tyne, June 16
WEEHAWKEN	Tyne	New York	Arr. June 10
WILLKOMMEN	Rotterdam	New York	P. Dungeness, June 19
WINNEBAGO	San Francisco	Japan	L. May 18

Latest Market Intelligence.

LONDON OIL MARKET.

Supplied by Messrs. Benjamin & Gee, 31, St. Mary Axe, E.C.

June 21st, 1907.

The following are the latest quotations for Refined petroleum:—Russian, $5\frac{7}{8}$d.-$6\frac{1}{4}$d.; Roumanian, $6\frac{1}{4}$d.; American, $6\frac{1}{2}$d.-$6\frac{3}{4}$d.; Water White, $7\frac{5}{8}$d.-$7\frac{3}{4}$d.

LUBRICATING OILS

There are no alterations to report in the quotations, which remain:—

American pale, £7 7s. 6d. to £11.
American dark cylinder, from £8 5s.
American filtered cylinder, from £11 2s. 6d.
Shellene, £5. No. 1 Russian, £10 7s. 6d.

TURPENTINE.

American turpentine is very weak for Spot and there has been a considerable fall in the price since our last report which was 48s. 3d. for Spot, whereas at the present moment it is quoted 42s. 6d. and 43s. 6d. for the last four months.

LIVERPOOL OIL MARKET.

June 20th.

Refined oils are quiet, and sellers quote $6\frac{1}{8}$d. for Russian, Galician or Roumanian; and $6\frac{5}{8}$d. to $7\frac{5}{8}$d. per gallon for American.

Petroleum Spirit continues at 1s. $0\frac{1}{2}$d. to 1s. 3d. per gallon for American deodorised, according to quality on the spot.

LATEST AMERICAN PRICES.

New York, June 20th.

Refined, in cases, is steady at 10·65; Standard White, 8·20; Credit balances, 1·78c.

Philadelphia, June 20th.

Standard White is still quoted at 8·15.

RUSSIA.

Baku, June 16th.

The Baku oil market is very firm. Light crude oil, spot, $30\frac{5}{8}$-31 copecs per pood; residuals, in ships, $31\frac{7}{8}$ copecs; kerosene, in ships, $30\frac{5}{8}$ copecs.

BELGIUM.

Antwerp, June 14th.

The petroleum market is firm. Price of Standard White, spot, 22 francs per 100 kilos.

FRANCE.

Paris, June 14th.

Illuminating oil is quoted in bulk, in whole tank waggons, 23 francs per hectolitre; spirit, 34·25 francs per hectolitre. Special white oil, 31 francs per hectolitre.

GERMANY.

Hamburg, June 16th.

The kerosene market is firm. The price of American Standard White is 7·00 marks per 50 kilos, Russian, 6·75 marks.

ROUMANIA.

June 14th.

	Francs.
Crude oil from different fields, including pipe line charges, per 100 kgs.	4·10-4·20
Refined oil, exclusive of taxes	9·00-10·00
Motor benzine, including taxes	23·00-24·00
Benzine, doubly refined	25·00-26·00
Residuals in tank waggons, at refinery	3·60-3·70
Paraffin	120·00-125·00

Prices for Export.

Refined oil in tank waggons, per 100 kgs.	7·50- —
Benzine, sp. gr. 0·710-0·715	23·00-24·00
„ sp. gr. 0·715-0·720	22·00-23·00
„ sp. gr. 0·730-0·740	15·00-16·00
„ sp. gr. 0·745-0·755	11·00-12·00

INDIA.

Bombay, May 30th.

Market strong.

Standard Oil Co., of New York.

Current rates are:—

American, "Snowflake," 150 deg.	Rs. 6	0	2
„ Chester, 125 deg.	4	8	2
„ Monkey Brand, 125 deg.	4	2	2
„ Bulk, 125 deg. (in local made tins)	3	10	0
„ „ 125 deg. (8 Imperial gallons)	3	1	0
„ "White Camelia" brand, 125 deg.	No stock.		

The Asiatic Petroleum Company, Limited.

Current rates are:—

Burmah oil, in tins, per pair	3	6	0
Sumatra "Rising Sun," bulk, per unit	3	0	0
„ „ tins, per pair	3	10	0
Silverlight cases, per case	5	8	0
Sumatra, "Anchor" per case	4	8	0

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IMPORTS of PETROLEUM into UNITED KINGDOM

Specially prepared for this Journal by the Custom House.

FOR THE WEEK ENDED 10TH JUNE, 1907—

Date.	Port and Importers.	Description.	No. of Gals.	Port Whence.
June.	London—			
4	Wilkins, Campbell and Co.	Lub. Gr.	480	Antwerp
4	London and India Dock Co.	Lub.	1,200	Hamburg
4	Worthington and Boler ..	,,	4,600	Philadel.
5	Lub. and Fuel Oils, Ltd. ..	,,	2,400	,,
5	A. Brown and Co.	,,	2,400	,,
6	,, ..	,,	1,080	Hamburg
6	Page, Son and East.. ..	,,	80	Antwerp
6	Lubricating & Fuel Oils, Ld.	,,	2,460	Philadel.
6	Fielder, Hickman and Co...	,,	7,200	,,
6	Perkins and Homer ..	,,	4,000	,,
6	Mordaunt Bros.	Lamp	9,500	Hamburg
6	J. C. Goodall..	Lub.	2,090	Antwerp
7	Mordaunt Bros.	,,	2,500	Philadel.
8	Anglo-American Oil Co. ..	,,	12,800	,,
10	Fielder, Hickman and Co...	,,	4,000	Rotterdam
10	Lubricating & Fuel Oils, Ld.	,,	10,000	Marseilles
10	R. Park and Co.	Lub. Gr.	120	,,
	Liverpool—			
4	Burnaby and Chantrell ..	L.Comp.	560	New York
4	Meade-King, Robinson & Co. (Eirvan)	Lub.	310,000	Batoum
5	,, ..	Spirit	21,000	Rotterdam
6	,, ..	Lub.	10,400	Hamburg
6	Worthington and Boler ..	,,	6,600	Philadel.
6	,, ...	M.Colza	400	,,
7	Vacuum Oil Co.	Lub.	9,600	,,
7	W. B. Dick and Co. ..	,,	9,290	,,
7	Crew, Levick and Co. ..	,,	34,070	,,
7	American Line	,,	2,160	,,
7	Meade-King, Robinson & Co.	,,	8,000	,,
7	,, ..	,,	2,400	Baltimore
8	A. Hopps and Sons	,,	2,480	,,
8	Midland Railway Co. ..	,,	930	Philadel.
8	W. H. Nott and Co. ..	,,	120	New York
10	Burnaby and Chantrell ..	,,	340	,,
10	Liverpool Storage Co. ..	,,	2,400	Philadel.
10	W. Gibson and Sons ..	Lamp	2,050	Boston
	Bristol—			
7	Anglo-American Oil Co. (Housatonic)	,,	875,880	Philadel.
21	,, ,,	Gas	427,480	,,
	Grimsby—			
7	J. Sutcliffe and Son	Lub.	1,350	Antwerp
	West Hartlepool—			
7	W.Hartlep'l Steam Nav. Co.	,,	360	Hamburg
	Hull—			
4	Wilsons and N.E. Railway Shipping Co.	,,	2,730	,,
5	,, ,,	,,	160	Antwerp
7	,, ,,	,,	240	Hamburg
	Manchester—			
4	Meade-King, Robinson & Co.	Lub.	10,400	Hamburg
4	Worthington and Boler ..	,,	480	Philadel.
4	Manchester Liners	,,	430	,,
7	Schofield and Co.	,,	630	Hamburg
7	Crew, Levick and Co. ..	,,	8,110	Philadel.
7	,, ..	M.Colza	7,210	,,
4	George B. Taylor	Lub.	74,640	,,
	Newcastle—			
8	Tyne-Tees S.S. Co. ..	,,	2,160	Antwerp
	Portsmouth—			
8/5	E. R. Bartlett	Lamp	4,000	Hamburg
	Glasgow—			
5	J. D. Smellie	Naphtha	20,000	Rotterdam
7	Anchor Line	Lub.	28,880	New York
10	,, ..	,,	46,600	,,
10	,, ..	M.Colza	4,000	,,
10	J. and A. Allan	,,	2,000	Philadel.
10	,, ..	Lub.	52,400	,,
	Grangemouth—			
4	Hopkins, Paton and Co. ..	,,	240	Antwerp
7	J. Currie and Co.	,,	400	Hamburg
7	,, ..	,,	5,480	,,
	Leith—			
4	J. Currie and Co.	,,	60	Christ'nsund
4	,, ...	,,	120	Hamburg
6	G. Gibson and Co.	,,	280	Antwerp
	Limerick—			
7	Consolidated Pet. Co. (Aras)	Lamp	1,602,410	New York
	Total for Week		3,668,840	

FOR THE WEEK ENDED JUNE 17TH, 1907—

Date.	Port and Importers.	Description.	No. of Galls.	Port Whence.
	London—			
11	London & India Docks Co..	Lub.	2,900	Hamburg
13	Page, Son and East ..	Lub.Gr.	440	Antwerp
13	T. L. Field and Co... ..	Lub.	320	New York
13	Shell Transport and Trad. Co. (Broadmayne)	Fuel	259,370	Pt. Arthur, Texas
14	Lub. and Fuel Oils Co. ..	Black Oil Lub.	4,100	Antwerp
14	Gas Lightg. and Improve. Co.	Benzine	15,000	Rotterdam
14	,, ..		15,000	,,
14	T. H. Lee	M.Lub.	210	Hamburg
14	British Pet. Co. (Batoum)..	R. Lamp	1,123,360	Batoum
14	Fielder, Hickman and Co...	Lub.	26,720	Philadel.
17	Anglo-American Oil Co. ..	,,	77,000	,,
17	Livett Frank and Sons ..	,,	800	,,
17	London and India Docks Co.	,,	1,700	Hamburg
17	G. W. Sheldon and Co. ..	L.Comp.	1,500	New York

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Date.	Port and Importer.	Description.	No. of Galls.	Port Whence.
	Liverpool—			
11	Geo. B. Taylor	Lub.	400	New York
12	Valvoline Oil Co.	,,	5,540	,,
12	Vacuum Oil Co.	,,	27,800	Philadel.
12	Stockdale and Doel	,,	2,490	Boston
13	Crew, Levick and Co. ..	,,	14,780	Philadel.
13	,, ..	M.Colza	5,100	,,
14	W. B. Dick and Co. ..	Lub.	8,960	,,
14	Meade-King, Robinson & Co.	M.Lub.	30,400	,,
17	Pickford's	,,	250	Hamburg
17	,, ..	M.L.P.	60	,,
17	Liverpool Warehousing Co..	M.Lub.	4,000	,,
17	Burnaby and Chantrell ..	L.Comp.	340	New York
	Barrow—			
13	Burnyip and McDougal (Broadmayne)	Fuel	683,820	Pt. Arthur, Texas
	Bristol—			
13	A. B. Oil Co...	Lub.	1,360	Hamburg
13	H. R. James and Sons ..	,,	8,000	New York
13	,, ...	M.Colza	1,000	,,
14	,, ..	,,	2,400	,,
14	,, ..	Lub.	2,400	,,
14	W. Smith and Co.	,,	37,480	,,
14	,, ..	Lamp	800	,,
14	Pickfords, Ltd.	Lub. Oil and Paste	420	Hamburg
	Grimsby—			
14	J. Sutcliffe and Son	Lub.	300	,,
14	,, ..	,,	1,000	Rotterdam
14	,, ...	,,	550	Antwerp
	Hull—			
11	Hull & Netherlands S.S. Co.	Tar Oil	2,400	Rotterdam
13	T. Wilson, Sons and Co. ..	Lub.	1,200	Riga
13	,, ..	,,	4,000	St.Petersbrg.
13	Wilsons and N.E. Railway Shipping Co.	,,	80	Hamburg
13	,, ,,	,,	600	Antwerp
	Manchester—			
11	British Pet. Co. (Suram) ..	Lamp	1,243,000	New York
11	Homelight Oil Co. (Hermione)	,,	839,160	Batoum
11	Meade-King, Robinson & Co.	Lub.	38,400	Philadel.
11	,, ,,	Lamp	4,800	,,
11	,, (Erivan)	Lub.	234,250	Batoum
11	Bramwell, Fern and Co. (Erivan)	,,	234,250	,,
11	,, ..	,,	1,440	Antwerp
12	,, ..	M.Lub.	3,380	New York
13	George B. Taylor	,,	77,680	,,
13	,, ...	,,	120	Hamburg
14	Meade-King, Robinson & Co.	,,	3,000	Philadel.
14	W. Hodgson and Co. ..	M.L.Gr.	600	New York
14	Anglo-American Oil Co. (Cuyaloga)	Illum.	1,087,430	Philadel.
14	,, ,,	Gas	581,750	,,
14	Manchester Liners	Lub.	2,400	,,
14	,, ...	M.Colza	1,000	,,
	Middlesbro'—			
14	E. Harris and Co. ..	M.Lub.	1,080	Antwerp
14	,, ...	Lub.Gr.	40	,,
	Swansea—			
11	Richards, Turpin and Co. ..	Lub.	4,800	New York
	Glasgow—			
17	J. and A. Allan	,,	37,575	Philadel.
28	,, ...	M.Colza	6,750	,,
	Grangemouth—			
11	J. Currie and Co.	Lub.	4,040	Hamburg
14	,, ..	L. Paste	360	,,
14	,, ..	Lub.	2,000	,,
	Leith—			
14	Geo. Gibson and Co. ..	,,	5,000	Antwerp
13	W. Graham-Yooll and Co. ..	Lamp	2,920	Hamburg
13	J. Currie and Co.	Lub.	140	,,
15	Henderson and McIntosh ..	,,	36,880	Philadel.
17	G. Gibson and Co.	,,	2,040	Antwerp
	Belfast—			
13	J. C. Pinkerton and Co. ..	,,	100	,,
	Total for Week		6,832,735	
	Total for the Fortnight		10,501,575	

ENGLISH PATENTS.

(Specially contributed by Messrs. EDWARD EVANS & Co. Consulting Engineers, Chartered Patent Agents, and Enrolled Patent Attorneys, of the United States, of 27, Chancery Lane, London, W.C.)

Applications Filed in Great Britain.

Improvement in Refining Mineral Oil.—Wallace McMullen, Edward Joseph Townsend and James Noad, 321, High Holborn, London. No. 10877 of 1907.

Process for Obtaining Lubricating Oil from Crude Oil.—William John Ryan and Charles Russell Burke, 4, South Street, Finsbury, London. No. 11185 of 1907.

Application Published in Great Britain.

Process for Mixing Light and Heavy Mineral Oils or Hydrocarbons.—Frederic Grill Claussen, of 48, Rue Castel Fidardo, Rome, Italy. No. 28014 of 1906.

This relates to a process for mixing a light hydrocarbon with a heavy hydrocarbon and obtaining a final product having a density approaching that of the light hydrocarbon consisting in mixing the two hydrocarbons, adding to the mixture sulphuric or other suitable acid, thoroughly stirring the mass, allowing the liquid to stand, and decanting same, said liquid being then treated with oxide of zinc or other substance capable of decolourising the liquid and of combining with and precipitating the traces of sulphuric or other acid still contained therein, the liquid being subsequently separated from the substance precipitated.

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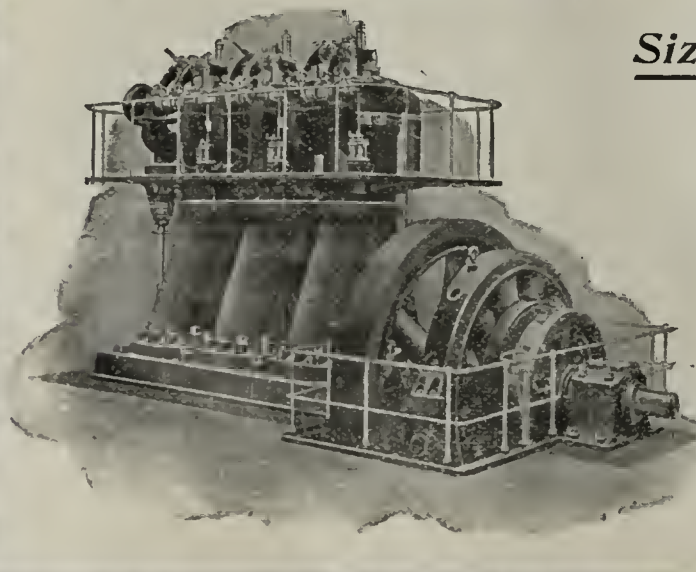

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